Appendix D

2002 Emissions Inventory Methodology and Documentation, and Appendices A through E for Inventory Documentation

2002 OZONE PRECURSOR EMISSIONS INVENTORY

AS REQUIRED BY THE CLEAN AIR ACT

FOR BULLITT AND OLDHAM COUNTIES
THE KENTUCKY PORTION OF THE LOUISVILLE 8-HOUR OZONE NONATTAINMENT AREA

Prepared by

THE KENTUCKY DIVISION FOR AIR QUALITY

Submitted by

THE KENTUCKY ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

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1.0 BACKGROUND AND EMISSIONS SUMMARY

1.1 BACKGROUND

Kentucky has developed a 2002 ozone precursor emissions inventory submittal for the Kentucky portion of the Louisville 8-hour ozone nonattainment area (i.e., Bullitt and Oldham Counties). The Kentucky portion of the Louisville area was designated nonattainment for the 8-hour ozone standard effective June 15, 2004, per an April 30, 2004, *Federal Register* notice. This document presents Kentucky's 2002 ozone precursor emissions inventory for Bullitt and Oldham Counties in Kentucky. This inventory was developed based on EPA guidance, direct consultation with EPA personnel, and previous emission inventory development experience. The inventory includes reactive volatile organic compounds (VOC), oxides of nitrogen (NO_x), and carbon monoxide (CO) emissions for area, point, non-highway mobile, highway mobile and biogenic sources.

The point source inventory was developed using the Division's existing emissions inventory database (i.e., TEMPO). The existing TEMPO database was updated using questionnaires and annual surveys completed by the sources and quality assured by division personnel.

Nonattainment area population information for Kentucky is provided in Table 1-1. The data provided in Table 1-1 are vital to many emission calculation procedures used to develop the emissions inventory, particularly for area and nonroad mobile sources. These data are frequently referenced throughout this document.

TABLE 1-1
2002 POPULATION

Kentucky Portion of the Louisville Ozone Nonattainment Area

COUNTY	TOTAL POPULATION
Bullitt	63,800
Oldham	49,310
Total	**113,110**

1.2 EMISSIONS SUMMARY

In preparing this inventory, several other agencies contributed information to the Division necessary for completing emission calculations. The Kentucky Transportation Cabinet[1] provided information essential for completing the mobile emissions portion of this document. The Kentucky Economic Development Cabinet[2] and the State Data Center[3] provided valuable population information used primarily in the preparation of the area source inventory.

Within the nonattainment areas, VOC, NO_x, and CO emissions were calculated for point, area, nonroad mobile, onroad mobile and biogenic sources.

The Division's existing point source emissions inventory database (TEMPO) was used to produce point source information. This database is updated annually for Title V major and minor sources and on a varying schedule for other sources. A copy of the point source inventory survey is included as *Appendix A* to this document.

Area source emissions were generally calculated based on current population, employment, and commodity data. Population related information was provided by the State Data Center[3] and the Kentucky Economic Development Cabinet.[2]

Highway vehicle emissions were estimated by using Mobile6.2 generated emission factors and daily vehicle miles traveled (DVMT) estimates. DVMTs and speed information were obtained from the Kentucky Transportation Cabinet[1].

The VOC emissions calculated in this document are for those VOC emissions determined by EPA to be photochemically reactive. All identified nonreactive VOC emissions have been removed, including perchloroethylene emissions from dry cleaning and surface cleaning.

A summary of the VOC, CO, and NO_x emissions in tons per summer day for the nonattainment area is provided in Table 1-2. This document includes emissions data with pre-existing controls in place. These emission control measures include autobody refinishing, consumer solvent use, architectural surface coating, traffic markings, and open burning; fuel and engine control measures related to on-road and non-road mobile sources including Phase II of the RFG program, along with requirements on vehicle refueling and reduced evaporative emissions; and engine control measures include the National Low Emission Vehicle program, along with requirements on nonroad

diesel engines, small nonroad engines (lawnmowers and garden equipment), and outboard marine engines.

Point source emissions are described in Section 2 with supporting information provided in *Appendix A*. Section 3 documents the area source inventory process with supporting information in *Appendix B*. Non-highway mobile emissions are discussed in Section 4 with supporting information in *Appendix C*. Mobile source emissions are discussed in Section 5 with supporting information in *Appendix D*. Biogenic emissions are documented in Section 6 and *Appendix E*.

TABLE 1-2
SUMMARY OF 2002 EMISSIONS
(Tons Per Summer Day)

Kentucky Portion of the Louisville Ozone Nonattainment Area

COUNTY	MOBILE			AREA			POINT			NON-HIGHWAY MOBILE			BIOGENIC			TOTAL EMISSIONS		
	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx
Bullitt	3.69	45.82	7.48	3.21	1.31	0.11	7.78	0.17	0.56	1.37	9.58	1.48	33.81	-	0.41	49.86	56.88	10.04
Oldham	2.22	26.68	4.36	2.20	0.89	0.07	0.55	0.01	0.01	1.18	15.13	1.21	19.64	-	0.49	25.79	42.71	6.14
Total Emissions	5.91	72.50	11.84	5.41	2.20	0.18	8.33	0.18	0.57	2.55	24.71	2.69	53.45	-	0.90	75.65	99.59	16.18

1.3 REFERENCES FOR SECTION 1

1. Kentucky Transportation Cabinet, Daily Vehicle Miles Traveled, 2002. Frankfort, Kentucky.

2. Kentucky Economic Development Cabinet, 2002 Kentucky Deskbook of Economic Statistics, Frankfort, Kentucky.

3. University of Louisville, State Data Center, 2002 Population Statistics, Louisville, Kentucky.

TABLE 1-3 LIST OF CONTACT PERSONS FOR THE KENTUCKY 2002 EMISSIONS INVENTORY

Kentucky Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601	Lead agency contact, overall inventory coordination and supervision, point, area, biogenic, non-highway mobile, and on-highway mobile source emissions and data activity levels	John Gowins (502) 573-3382
Kentucky Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601	On-Highway mobile and area source emissions and data activity levels	Joe Forgacs (502) 573-3382

2.0 POINT SOURCES

2.1 INTRODUCTION AND SCOPE

This section documents the development of the 2002 point source emissions inventory for the Kentucky portion of the Louisville 8-hour ozone nonattainment area, which includes Bullitt and Oldham Counties. The Louisville Metro Air Pollution Control District (LMAPCD) is responsible for data relating to Jefferson County in Kentucky. The LMAPCD documentation is not part of this submittal. For the purpose of this inventory, point sources are defined as stationary, commercial, or industrial operations that emit 10 tons or more per year of volatile organic compounds (VOC) or 100 tons or more of nitrogen oxides (NO_x) or carbon monoxide (CO). Due to the lower cut-off size for VOC sources, the majority of point sources in the nonattainment area have VOC emissions; therefore, most of this section is dedicated to these sources. This point source inventory consists of actual emissions for 2002, and includes sources in the ozone nonattainment counties.

Emissions from point sources are presented using two emission rate formats: annual, tons per year (TYR) and daily, tons per summer day (TSD) rates. Although not specifically required, annual emission rates are provided in order to assist the review agency and the public in performing comparison checks against the existing TEMPO[5] database. In addition, the annual emission rate identifies point sources impacting on the area.

The remainder of this chapter is divided into three parts. Section 2.2 describes the approach used in developing and compiling the point source listing for the ozone nonattainment area. Section 2.3 presents an overall summary of the point source VOC, NO_x, and CO emissions. Section 2.4 lists the references used in preparing this section.

2.2 METHODOLOGY AND APPROACH

This section describes the methodology and approach used in developing information for the 2002 point source emissions inventory. The purpose for including this section is to provide sufficient detail to the review agency and the public to assist them in determining the adequacy of this inventory based on the most recent guidance. In addition, specific elements of the methodology and approach are being described in order to minimize the need for later clarifications.

The development activities for the 2002 point source emissions inventory were initiated in the

spring of 2004. The approach used in compiling the point source listing and emissions data was based on guidance issued by the U.S. Environmental Protection Agency.[1,2]

As mentioned previously, the Kentucky Division for Air Quality (DAQ) was the agency responsible for development of the 2002 emissions inventory. Data collection activities began in the spring of 2004. Since Kentucky already had an existing emissions database of air pollution sources in the state, a thorough review of this database formed the starting point for overall inventory development. A brief description of the methodology and approach used to accomplish these tasks is presented in the following subsections.

2.2.1 Review of Existing Database

The review of the Division's TEMPO[5] database allowed personnel to identify which sources in a given geographical area would need to be updated for this inventory effort. Also, a review of each source in the existing system provided information on whether specific sources had been updated during the normal yearly update or if they would need to be updated separately.

2.2.2 Source Survey

Point source emission surveys were mailed to appropriate point sources (*Please see related survey information provided in Appendix A*). The surveys were designed to have the facilities update specific information as outlined in EPA guidance. In some instances follow-up telephone calls were made to clarify responses given by sources.

2.2.3 Data Evaluation

The next step in developing the point source inventory was to evaluate the collected data. All information received from the sources was checked by emission inventory personnel to ensure that the responses were within reasonable levels.

Another aspect of data evaluation was the application of rule effectiveness for sources subject to regulatory emission limitations and a seasonal adjustment factor for facilities not operating on a uniform schedule. A factor of 80 percent was applied to the control device efficiency to adjust the resulting emission estimates to account for rule effectiveness. The rule effectiveness factor, pursuant to EPA Region 4 guidance,[3] was applied to VOC, CO, and NO_x annual emissions totals and is therefore also

reflected in daily emissions. Seasonal adjustment was applied only to daily emission totals.

2.2.4 Data Compilation

One of the final steps in developing the point source inventory involves submitting the data in an acceptable format. Division personnel routinely submit point source data to EPA's National Emissions Inventory (NEI) database.

2.2.5 Emission Calculations

Point source emissions were calculated using the following equations and variables. *Appendix A* contains point source emissions information utilized to calculate the point source emissions. Information requested by a source to be confidential in accordance with applicable laws is omitted from *Appendix A*.

1. Control Efficiency Adjusted for Rule Effectiveness

CTEFFN	=	(1 - ((CTEFF)(RE))
CTEFFN	=	Actual Control Efficiency Adjusted for Rule Effectiveness
CTEFF	=	Actual Control Efficiency
RE	=	Rule Effectiveness = .80

2. Actual Process Rate for Typical Summer Day

CPROD
NPROD = ((FUELP) (ATHJ) / 100) / ((DWK) (WKYR) (.25))
VPROD

CPROD, NPROD, and VPROD = Actual Process Rate for Typical Summer Day for CO, NOx, and VOC, respectively

FUELP	=	(Actual) Annual Process Rate = Total Throughput
ATHJ	=	Summer Seasonal Activity
DWK	=	Number of Days Per Week Source is in Operation
WKYR	=	Number of Weeks Per Year Source is in Operation

3. Actual Emissions for Typical Summer Day

CATND
NATND = ((_PROD) (EF) (CTEFFN)) / 2000
VATND

CATND, NATND, and VATND	=	Typical Summer Day Emissions for CO, NOx, and VOC, respectively
_PROD	=	CPROD, NPROD, or VPROD as Appropriate
EF	=	Emission Factor

4. Annual Actual Emissions

CATNY
NATNY = ((FUELP) (EF) (CTEFFN)) / 2000
VATNY

CATNY, NATNY, and VATNY	=	Annual Emissions for CO, NOx, and VOC, respectively
FUELP	=	(Actual) Annual Process Rate = Annual Throughput
EF	=	Emission Factor

2.3 SUMMARY OF POINT SOURCE EMISSIONS

2.3.1 KENTUCKY PORTION OF THE LOUISVILLE, KY-IN, AREA

This inventory includes VOC, CO, and NO_x point source emissions for Bullitt and Oldham Counties, Kentucky. County level point source emission totals are provided in Table 2-1. Additionally, Table 2-1 in *Appendix A* catalogues point source emissions by facility, by county, and provides a county total. These tables lists the facilities; the facility identification numbers; SIC codes[4], and the 2002 annual emissions, adjusted for rule effectiveness, in tons per year; and the 2002 daily emissions with seasonal adjustments, in tons per summer day.

Table 2-1 Kentucky Portion of Louisville Area 2002 Point Source Emissions

COUNTY	FACILITY NAME	Plant I.D. #	SIC Code	VOC tpy	VOC tpd	CO tpy	CO tpd	NO2 tpy	NO2 tpd
BULLITT	KENTUCKY SOLITE CORP	21-029-00002	3295	47.76	0.13	36.95	0.10	116.58	0.32
BULLITT	JOSEPH SEAGRAM & SONS INC	21-029-00004	2085	1211.99	3.33	0.00	0.00	0.00	0.00
BULLITT	JIM BEAM BRANDS CO	21-029-00005	2084	1370.57	3.75	33.49	0.07	95.53	0.24
BULLITT	PUBLISHERS PRINTING CO	21-029-00019	2721	46.02	0.17	1.11	0.00	1.33	0.00
BULLITT	PUBLISHERS PRINTING CO	21-029-00032	2721	103.95	0.40	1.51	0.00	1.80	0.00
OLDHAM	NEXANS MAGNET WIRE INC	21-185-00004	3357	204.10	0.55	4.17	0.01	4.97	0.01
			BULLITT AND OLDHAM TOTAL	**2984.39**	**8.33**	**77.23**	**0.18**	**220.21**	**0.57**

2.4 REFERENCES FOR SECTION 2

1. U.S. Environmental Protection Agency. *Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations.* EPA-454/R-05-001. Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina. August 2005, which references *Emission Inventory Requirements for Post-1987 Ozone State Implementation Plans.* EPA-450/4-88-019. Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina. December 1988.

2. U.S. Environmental Protection Agency. *Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations.* EPA-454/R-05-001. Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina. August 2005, which references *Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone, Volume I: General Guidance for Stationary Sources.* EPA-450/4-91-016. Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina. May 1991.

3. Telecon. U.S. Environmental Protection Agency, Region 4, Ms. Yasmin Yorker, February 4, 1992, concerning rule effectiveness.

4. Executive Office of the President, Office of Management and Budget. *Standard Industrial Classification Manual.* Order no. PB 87-100012. National Technical Information Service, Springfield, Virginia 22161. 1987.

5. Kentucky Division for Air Quality's TEMPO Point Source Database for the Year 2002.

3.0 AREA SOURCES

3.1 INTRODUCTION AND SCOPE

This section documents the development of the 2002 area source emissions inventory for the Kentucky portion of the Louisville 8-hour ozone nonattainment area (i.e., Bullitt and Oldham Counties). Area sources include non-traditional sources whose emissions are too small to be treated as stationary point sources individually. However, where several are located in a specific geographic location the combined emissions can be substantial. The emissions documented in this section are presented on an annual basis and for a typical summer day during the ozone season.

Including this introduction and scope, Section 3 is organized into four other subsections. Section 3.2 describes the approach taken to estimate emissions from each source category. Section 3.3 provides a summary of the area source emissions in the nonattainment area. Information explaining the calculations used to derive the area source emissions is discussed in Section 3.4. The references used in developing the area source portion of the inventory are located in Section 3.5.

3.2 METHODOLOGY AND APPROACH

3.2.1 Source Category Identification

The majority of area source categories considered in this inventory were identified from *Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone, Volume I.*[1] In addition, the U.S. EPA's Emission Inventory Improvement Program (EIIP) guidance[22] was consulted and utilized where feasible. Emissions estimates for some area source categories are not included in the inventory. Agricultural and slash burning, snowmobiles, and orchard heaters are not commonplace in Kentucky in the summer months and therefore do not warrant inclusion. Rationale for not including these categories is discussed later in this narrative.

3.2.2 Emission Estimation Approach

Generally, area source emissions are calculated using factors based on one of four criteria for the inventoried areas: (a) population (per-capita) see Table 3-1, (b) commodity consumption, (c) level-of-activity, or (d) employment. These calculations are further explained in Section 3.4.

Table 3-1
Area Population Information

County	Population
Bullitt	63,800
Oldham	49,310
TOTAL	**113,110**

3.3 SUMMARY OF AREA SOURCE EMISSIONS

Tables 3-1 to 3-31 provide the inventory results for each category of area source emissions. Tables 3-29 and 3-31 contain the contribution of each county for each area source category and provides a total for that county located in Kentucky.

3.4 DISCUSSION OF THE AREA SOURCE CATEGORIES

Subsections 3.4.1 through 3.4.6 contain the descriptions for individual area source types and the methods used to calculate emissions for each. Calculations used to determine emissions are included within the narrative.

3.4.1. Gasoline Distribution.

Four categories are included under gasoline distribution: (a) Storage tank breathing losses; (b) Tank trucks in transit; (c) Tank truck unloading; and (d) Vehicle refueling. Vehicle refueling emissions are included in the Highway Mobile Source Inventory (Section 5) in the Mobile6.2 modeling runs.

Retail gasoline service station sales in 2002, for both the state and individual counties, were obtained from the 2002 *Economic Census Retail Trade* publication for Kentucky.[6] The 2002 taxable gasoline sales were only available at the state level and were obtained from the Kentucky Revenue Cabinet's Motor Fuels Tax Section.[7] The 2002 statewide gasoline sales were segregated to the county level using 1997 retail trade sales information. 2,191.84 million gallons of gasoline were sold in Kentucky in 2002. Emission factors were obtained from Tables 5.2-5 and 5.2-7 of AP-42, Volume I.[2, 22]

To calculate the emissions of VOC from any of the sources noted above, it was necessary to determine the total sales, in gallons, of gasoline in the nonattainment area. Only the *Census Retail*

Trade publication[6] lists county and state gasoline sales. Therefore, the percentage of county gasoline sales relative to the statewide gasoline in 2002 was calculated. State sales were obtained from Table 1 of the *Census Retail Trade* publication,[6] and county sales obtained from Table 3 of that document. This percentage was applied to the total state taxable gasoline sales in 2002 to determine county gasoline sales in 2002. After the county gasoline sales in 2002 were determined, specific methods were used to calculate the emissions of VOC from each of the categories listed. The calculations and procedures described in EPA guidance,[1] were utilized. County-specific gasoline marketing data are shown in Table 3-2.

Table 3-2
Gasoline Marketing Data (1000 Gallons)

County	Gasoline Sales
Bullitt	64,539
Oldham	33,093
TOTAL	**97,632**

3.4.1.1 Storage Tank Breathing Losses

County gasoline sales were multiplied by the emission factor found in Table 5.2-7 of AP-42, Volume I.[2] Tons of VOC emissions per year were converted to tons per typical summer day in accordance with Section 5.9 of reference 1. The seasonal adjustment factor (SAF) was determined by adding the total gasoline sales for June, July, and August of 2002--then dividing that total by the total state gasoline sales for 2002. This dividend was then divided by 0.25 to determine the percentage of activity, which occurred during those months since it was noted that the activity level for that quarter was higher than the other quarters. The denominator represents the uniform seasonal rate since one quarter or season equals 0.25. So if the total gasoline sales for June, July, and August is one quarter of the total annual sales, then the SAF equals 0.25 / 0.25, or 1.00. The seasonal adjustment factor applied for the gasoline marketing was 1.079. The activity days per week were considered to be 7. The formula for this calculation is as follows:

$$\left(\frac{\text{((June + July + August Monthly Gasoline Gallon Totals)/ (Year-End Gasoline Gallon Total)}}{0.25} \right)$$

The calculations used to determine emissions from storage tank breathing losses are as follows.

$$TPY = \left(\text{County Sales (gallons)} \times \frac{1.0 \text{ lbs.}}{1000 \text{ (gal)}} \right) \times \frac{1 \text{ ton}}{(2000 \text{ lbs})}$$

$$TSD = (TPY \times SAF) / (7 \times 52)$$

The emissions, by county, produced by storage tank breathing losses are shown in Table 3-3.

3.4.1.2 Tank Trucks in Transit

Since some gasoline is delivered to bulk plants rather than delivered directly to service stations from bulk terminals, the amount of gasoline transferred in any area may exceed the total gasoline consumption, due to the additional trips involved. Reference 1 makes the following statements relating to this matter:

Table 3-3
Summary of Emissions From
Gasoline Breathing Losses

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	32.27	0.10
Oldham	16.55	0.05
TOTAL	**48.82**	**0.15**

"A nationwide average of roughly 25 percent of all gasoline consumed goes through bulk plants. Hence, gasoline distribution in an area could be multiplied by 1.25 to estimate gasoline transported." and

"Emissions from tank trucks in transit, however, will generally be minimal, in most areas. Hence, a great deal of effort is not warranted in making this adjustment."

Based on these statements, and in the absence of specific bulk plant throughput information, 2002 county gasoline sales were multiplied by 1.25 to obtain the total gasoline transported in 2002. Per EPA EIIP guidance[22], the midpoints of the typical AP-42 Table 5.2-5 emission factors for tank trucks

or bulk tanks loaded with product and return with vapor were determined, combined, and applied to gasoline transported in each county to determine the emissions of VOC per year. The yearly emissions were then converted to tons per typical summer day. The seasonal adjustment factor used for tank breathing losses was 1.079. The activity days per week were considered 6. The calculation used to figure emissions from tank trucks in transit are as follows.

$$TPY \left(\frac{(\text{County Gas Sales (gallons)} \times 1.25) \times .060 \text{ lbs.}}{1000 \text{gals.}} \right) \times \frac{1 \text{ ton}}{(2000 \text{ lbs})}$$

$$TSD = (TPY \times SAF) / (6 \times 52)$$

The emissions, by county, produced by tank trucks in transit are provided in Table 3-4. Bullitt County does not have any bulk plants, therefore the above calculation for Bullitt County has the county gas sales multiplied by 1.00 instead of 1.25.

Table 3-4
Summary of Emissions From
Tank Trucks In Transit

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	1.94	0.01
Oldham	1.24	0.00
TOTAL	**3.18**	**0.01**

3.4.1.3. Vehicle Refueling

The emissions for vehicle refueling have been calculated by Mobile6.2 and are included in the Mobile Source Emissions Inventory in Section 5, but are not listed separately.

3.4.1.4 Tank Truck Unloading

To calculate the emissions of VOC produced by tank truck unloading, the division performed a review of gasoline stations located in the ozone nonattainment area. The following assumptions were made.

For the previous 1-hour ozone maintenance area (i.e., 41% of Bullitt County, 50% of Oldham

County) 98.5% of the gasoline throughput was subject to Stage I vapor recovery controls. The remaining 1.5% of the gasoline throughput was subject to submerged fill controls. For the rest of each county area (i.e., 59% of Bullitt County, 50% of Oldham County) 90% of the gasoline throughput was subject to submerged filling and the remaining 10% of the gasoline throughput was subject to splash filling techniques.

For Stage I areas, there are two percentages applied to Tank Truck Unloading: 98.5% for Splash Fill (Stage I) controls and 1.5% for Submerged Fill controls. For entire counties only two calculations are involved: one to incorporate Stage I controls and one to incorporate Submerged Fill controls. However, a county with a former 1-hour ozone nonattainment portion involves four calculations instead of two. The four calculations are: attainment portion Submerged Fill, nonattainment portion Submerged Fill, attainment portion Splash Fill, and nonattainment portion Splash Fill.

Based on these assumptions, the fraction of gallons of gasoline throughput using each fill method was multiplied by the appropriate emission factors from Table 5.2-7 of AP-42, Volume I[2] to derive emissions. Rule penetration was implicitly applied by allocating the gasoline throughput for each fill method. The yearly emissions were converted to tons per typical summer day in accordance with Section 5.9 of Reference 1. The seasonal adjustment factor of 1.079 for gasoline marketing was applied. The activity days per week for tank truck unloading was 6.[1] The calculations used to determine emissions from this category are as follows.

For the 1-hour maintenance portions of Bullitt and Oldham Counties:

Submerged Fill

$$TPY = \left(\begin{array}{l} \text{Apportioned} \\ \text{(County Sales} \\ \text{(gallons)} \end{array} - \begin{array}{l} \text{Pt. Source} \\ \text{Gas thruput)} \\ \text{(gallons)} \end{array} \times .015 \right) \times \frac{7.3 \text{ lbs.}}{1000 \text{ gals}} \times \frac{1 \text{ ton}}{(2000 \text{ lbs})}$$

$$TSD = (TPY \times SAF) / (6 \times 52)$$

Splash Fill

$$TPY = \left(\begin{array}{l} \text{Apportioned} \\ \text{(County Sales} \\ \text{(gallons)} \end{array} - \begin{array}{l} \text{Pt. Source} \\ \text{Gas thruput)} \\ \text{(gallons)} \end{array} \times .985 \right) \times \frac{11.5 \text{ lbs.}}{1000 \text{ gals}} \times 1 - \frac{97.4\% \times .80}{100} \times \frac{1 \text{ ton}}{(2000 \text{ lbs})}$$

TPY = Submerged Fill + Stage I Fill

TSD = (TPY x SAF) / (6 x 52)

Total Tank Truck Unloading Annual Emissions = Submerged Fill Annual + Splash Fill Annual

Total Tank Truck Unloading Summer Daily Emissions = Submerged Fill Daily + Splash Fill Daily

For the remainder of Bullitt and Oldham Counties:

Submerged Fill

$$TPY = \left(\begin{array}{l} \text{Apportioned} \\ \text{County Sales} \\ \text{(gallons)} \end{array} \times .90 \right) \frac{7.3 \text{ lbs.}}{1000 \text{ gals}} \times \frac{1 \text{ ton}}{(2000 \text{ lbs})}$$

TSD = (TPY x SAF) / (6 x 52)

Splash Fill

$$TPY = \left(\begin{array}{l} \text{Apportioned} \\ \text{County Sales} \\ \text{(gallons)} \end{array} \times .10 \right) \frac{11.5 \text{ lbs.}}{1000 \text{ gals}} \times \frac{1 \text{ ton}}{(2000 \text{ lbs})}$$

TSD = (TPY x SAF) / (6 x 52)

Total Tank Truck Unloading Annual Emissions = Submerged Fill Annual + Splash Fill Annual

Total Tank Truck Unloading Summer Daily Emissions = Submerged Fill Daily + Splash Fill Daily

The emissions, by county, produced by tank truck unloading are shown in Table 3-5.

Table 3-5
Summary of Emissions From
Tank Truck Unloading

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	181.53	0.63
Oldham	85.48	0.29
TOTAL	**267.01**	**0.92**

3.4.1.5 Aircraft Refueling

There are no airports in Bullitt or Oldham Counties, therefore there are no emissions for aircraft refueling.

3.4.1.6 Petroleum Vessel Loading & Unloading

This category is included in the Point Source Inventory, Section 2.

3.4.2 Stationary Source Solvent Evaporation

The following eight subcategories are included in this area source category. All of these emit Volatile Organic Compounds (VOCs) because of their solvent usage. They are:

(1) Dry Cleaning;

(2) Surface Cleaning;

(3) Surface Coating;

(4) Graphic Arts;

(5) Cutback Asphalt Paving;

(6) Pesticide Applications; and,

(7) Commercial/Consumer Solvent Use.

Each of the previous-mentioned subcategories is discussed individually in the following subsections.

3.4.2.1 Dry Cleaning

Dry cleaning operations vary in size, type of service, and type of solvent used. Industrial,

commercial, and self-service facilities clean not only personal clothing, but also uniforms, linens, drapes, and other fabric materials. Per previous EPA guidance[23], since emissions for coin operated and commercial/industrial dry cleaning are considered to be nonreactive (i.e., perchloroethylene emissions) only other solvent emissions are reflected in the VOC emissions provided for dry cleaning

Population statistics for the counties examined were obtained from information provided by the Kentucky State Data Center[3,4] and are found in Table 3-1.

Annual tons of VOC were calculated by multiplying the per capita emission factor by the county population. Rule penetration is implicitly applied by using the distinct per capita emission factors for each type of dry cleaning facility.

Emissions per typical summer day for this area source category were calculated using federal guidance.[1] The methodology involves multiplying the following per capita VOC emission factors by an area's population to estimate the dry cleaning emissions:

Mineral Spirits & other solvent facilities: 1.1 lb/capita/yr

The calculated annual tons of VOC emissions were then divided by the product of the number of activity days per week and the number of weeks in a year. For dry cleaning, no seasonal adjustment factor was applied since activity was considered uniform year round and the activity days per week was 5. [1]

The calculations for this category are as follows:

$$TPY = \frac{Other\ Solvents}{(EF \times population)} \times \frac{1\ ton}{2000\ lbs} \qquad TSD = TPY/(5 \times 52)$$

Emissions from dry cleaning activities are provided for individual counties in Table 3-6.

Table 3-6
Summary of Emissions From
Dry Cleaning

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	35.09	0.13
Oldham	27.12	0.10
TOTAL	**62.21**	**0.23**

3.4.2.2 Surface Cleaning

Surface cleaning or degreasing is a physical method of removing grease, wax, or dirt from metal, glass, and fabric surfaces by exposing the material to an organic solvent. Degreasing activity is one of the many production steps associated with industrial categories involving metal furniture, primary metals, fabricated products, machinery, electric equipment, and instrumentation. In addition, there are many miscellaneous degreasing operations associated with auto repair shops, gasoline stations, and maintenance shops. There are three types of degreasers: small cold cleaners, open top vapor degreasers, and conveyorized vapor degreasers.

Surface operations, which include cold cleaning, manufacturing, and vapor in-line cleaning and others use organic solvents as room temperature liquids. Uses include wiping, spraying, or dipping parts in the solvent. In open top vapor degreasing, cleaning takes place by exposing the part to solvent vapor. Conveyorized vapor degreasing entails the same activity as open top degreasing except that the parts to be cleaned continuously move in and out of the degreaser.

Federal guidance[1] provided the methodology the division used for calculating VOC emissions for this area source category. It involves multiplying the following per capita VOC emission factors by an area's population to estimate total surface cleaning emissions. Per EPA guidance[24], to avoid double counting, point source degreasing emissions were subtracted from the area source surface cleaning VOC emissions as appropriate.

Surface Cleaning Total: 4.3 lb/capita/yr
- Cold Cleaning
  - Auto Repair: 2.5 lb/capita/yr
  - Manufacturing: 1.1 lb/capita/yr
- Vapor & In-Line Cleaning
  - Electronics & Electrical : 0.21 lb/capita/yr
  - Other: 0.49 lb/capita/yr

Emissions per typical summer day for this area source category were calculated using section 5.9 of the federal guidance document.[1] The calculated annual tons of VOC divided by the product of the number of activity days per week and the number of weeks in a year. For surface cleaning, as found in Table 5.8-1, no seasonal adjustment factor was applied since activity was considered uniform year round and the activity days per week was 6[1].

Emissions were calculated using the following method.

$$TPY = ((EF \times population) \times \frac{1\ ton}{2000 lbs})) * .77^{25} \quad \text{---} \quad TSD = TPY / (6 \times 52)$$

(Cold Cleaning Auto Repair)

+

$$TPY = ((EF \times population) \times \frac{1\ ton}{2000 lbs})) * .77^{25} \quad \text{---} \quad TSD = TPY / (6 \times 52)$$

(Cold Cleaning Manufacturing)

+

$$((EF \times population) \times \frac{1\ ton}{2000 lbs}) * .77^{25} \quad \text{---} \quad TSD = TPY / (6 \times 52)$$

(Vapor & In-Line)

Area Source Surface Cleaning VOC Emissions (TSD) = TSD – Pt. Source Surface Cleaning VOC Emissions[24]

Per EPA guidance[25], perchloroethylene emissions have been removed from the surface cleaning emissions by reducing the emissions by 23 percent. Surface cleaning emissions are provided for individual counties in Table 3-7. Population information is provided in Table 3-1 and perchloroethylene removal and double counting information for surface cleaning is provided in *Appendix E.*

Table 3-7
Summary of Emissions* From
Surface Cleaning Operations

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	105.62	0.35
Oldham	81.63	0.26
TOTAL	**187.25**	**0.61**

*Perchloroethylene emissions have been removed from the surface cleaning emissions by reducing the emissions by 23 percent per EPA's May1993 Helms guidance memorandum[25].

3.4.2.3 Surface Coating

Surface coatings include paints, enamels, varnishes, lacquers and other product finishes. All of these products include either a water-based or solvent-based liquid carrier, which generally

evaporates in the drying or curing process.

VOC emissions result from the evaporation of the paint solvent and any additional solvent used to thin the paint. Substantial emissions also result from the use of solvents in cleaning the surface prior to painting and in cleaning painting equipment after use.

Surface Coating operations are separated into two groups, industrial and nonindustrial. Industrial surface coating operations for such products as appliances, automobiles, paper, fabric and cans are included in the point source inventory. Non-industrial surface coating includes refinishing of automobiles, architectural coating, and traffic paints and are inventoried as area sources.

3.4.2.3.1 Architectural Surface Coating

Architectural surface coatings, often called "trade paints," are used primarily by homeowners and painting contractors to coat the interior/exterior of houses and buildings and on the surfaces of other structures such as pavements, curbs, or signs. Coating materials are applied to surfaces by spray, brush, roller, and dry at ambient conditions. Architectural coatings differ from industrial coatings, which are applied to manufactured products and are usually oven cured. Painting contractors and homeowners are the major users of architectural coatings.

Federal guidance[1] provided the methodology the division used for calculating VOC emissions for this area source category. This methodology involves multiplying the following per capita VOC emission factor by an area's population to estimate the architectural surface coating emissions:

Architectural Surface Coating: 4.6 lb/capita/yr (Represents reactive VOC). Population statistics for all areas examined were obtained from the University of Louisville, Urban Data Center.[3,4] Solvent use, which accounts for 25 to 40 percent of all solvent loss associated with architectural surface coating, is included in this per capita factor. Solvents used in architectural surface coatings or thinning and cleanup contain almost 100 percent reactive compounds.

Emissions per typical summer day for this area source category were calculated using Section 5.9 of Reference 1. The calculated annual tons of VOC were multiplied by an appropriate seasonal adjustment factor and then divided by the product of the number of activity days per week and the number of weeks in a year. For architectural surface coating the seasonal adjustment factor was 1.3 and the activity days per week was 7.[1]

The following calculation was used to estimate emissions from architectural surface coating.

$$TPY = (EF \times Population) \times \frac{1\ ton}{(2000\ lbs)}$$

$$TSD = (TPY \times SAF) / (7 \times 52)$$

Architectural surface coating emissions are provided in Table 3-8.

Table 3-8
Summary of Emissions From
Architectural Surface Coating

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	146.74	0.52
Oldham	113.41	0.41
TOTAL	**260.15**	**0.93**

3.4.2.3.2 Automobile Refinishing

Automobile refinishing is the repainting of worn or damaged automobiles, light duty trucks, and other vehicles. Surface coating during manufacturing is not considered refinishing. In automobile refinishing, lacquers and enamels are usually sprayed in paint booths. Since vehicles contain heat sensitive plastics and rubber, the solvent borne coatings are used in low temperature ovens. Paint booths may be equipped with paint arresters or water curtains to handle overspray. Solvents used in auto body refinishing will consist almost entirely of reactive VOC.

Federal guidance[1] provided the methodology the division used for calculating VOC emissions for this area source category. This methodology involves multiplying the following VOC per capita emission factor by an area's population to estimate auto body emissions:

Auto Body Refinishing: 2.3 lb/capita/yr

According to federal guidance, because auto body refinishing may be generally expected to relate to human activity, such a population based approach will provide reasonable emission estimates for this area source category. Population statistics for all areas examined were obtained

from state references.[3,4]

Emissions per typical summer day for this area source category were calculated using federal guidance[1]. The calculated annual tons of VOC divided by the product of the number of activity days per week and by the number of weeks in a year. For auto body refinishing no seasonal adjustment factor was applied since the activity was considered uniform year round. The activity days per week was 5.

The calculations used to figure yearly and daily VOC emissions for this category are as follows.

$$TPY = (EF \times population) \times \frac{1\ ton}{(2000\ lbs)}$$

$$TPD = TPY / (5 \times 52)$$

Auto body refinishing emissions are provided for individual counties in Table 3-9. Population information for individual areas is provided in Table 3-1.

Table 3-9
Summary of Emissions From
Automobile Refinishing

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	73.37	0.28
Oldham	56.71	0.22
TOTAL	**130.08**	**0.50**

3.4.2.3.3 Traffic Markings

Traffic paints are used to mark pavement. These markings include dividing lines for traffic lanes, parking space markings, crosswalks, arrows, and other markings. These markings are usually applied by state or local highway maintenance crews or by contractors during road construction. VOC emissions result from the evaporation of organic solvents during and shortly after the application of the marking paint. Traffic paint emissions are included in the area source inventory

the emissions are not from any specific plant, but instead emanate from the roadways and surfaces where markings are applied.

Federal guidance[1,27,28,29] provided the methodology the division used for calculating VOC emissions for this area source category. This methodology involves multiplying the following VOC per capita emission factor by an area's population to estimate traffic marking emissions.

Traffic marking: 0.5 lb/capita/yr

According to federal guidance, because traffic marking emissions may be generally expected to relate to human activity, such a population-based approach will provide reasonable emission estimates for this area source category. The activity level was considered 5 days per week. No seasonal adjustment factor was applied for this category since none was provided in Volume I guidance.

The calculations used to derive yearly and daily VOC emissions for this category are as follows.

$$TPY = (EF \times population) \times \frac{1\ ton}{(2000\ lbs)}$$

$$TPD = TPY / (5 \times 52)$$

Traffic marking emissions are provided in Table 3-10. Population statistics for individual areas are provided in Table 3-1.

Table 3-10
Summary of Emissions From
Traffic Markings

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	15.95	0.06
Oldham	12.33	0.05
TOTAL	**28.28**	**0.11**

3.4.2.3.4 Other Small Industrial Surface Coating

Industrial surface coating includes the coating, during manufacture, of magnet wire, automobiles, cans, metal coils, paper, fabric, metal and wood furniture, and miscellaneous products. According to federal guidance[1], to the maximum extent possible, small industrial surface coating

operations should be treated as point sources. Therefore, the division will include small industrial surface coating emissions in the point source emissions inventory.

3.4.2.4 Graphic Arts

The graphic arts or printing industry consists of approximately 60,000 facilities (SIC 27) nationwide. About half of these establishments are in-house printing services in nonprinting industries. Printing newspapers, books, magazines, fabrics, wall coverings, and other materials, is considered a graphic arts application. Five types of printing are used in the industry: letterpress, flexography, lithography, (roto)gravure, and screen process printing.

Solvent use is an integral part of the process and is the primary source of VOC emissions. Associated cleanup operations also require the use of solvents, thereby contributing to VOC emissions for the industry. All solvents used in the graphic arts industry are considered reactive.

Federal guidance[1] provided the methodology the division used for calculating VOC emissions for this area source category. This methodology involves multiplying the following per capita VOC emission factor by an area's population to estimate VOC emissions from graphic art facilities, which emit less than 100 tons:

Graphic Arts: 1.3 lb/capita/yr

In accordance with federal guidance[1], any emissions associated with point source graphic arts facilities, which emit under 100 tons per year, should be subtracted from the area source inventory. Graphic arts emissions from point sources greater than or equal to 100 tons per year should not be subtracted, since they have already been excluded from the area source graphic arts emission factor of 1.3 lb/person/yr.

Population statistics for all areas examined were obtained from state references.[3,4]

Emissions per typical summer day for this area source category were calculated using federal guidance.[1] The calculated annual tons of VOC were then divided by the product of the number of activity days per week and the number of weeks in a year. For graphic arts no seasonal adjustment factor was applied since the activity was considered uniform year round and the activity days per week was 5.[1] Calculations for this category are as follows:

$TPY = ((EF \times Population) - Point\ Source\ Emissions)) \times \frac{1\ ton}{(2000\ lbs)}$

$TPD = TPY / (5 \times 52)$

Graphic arts emissions are provided in Table 3-11. Population information is provided in Table 3-1.

Table 3-11
Summary of Emissions From
Graphic Arts

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	0.00	0.00
Oldham	32.05	0.12
TOTAL	**32.05**	**0.12**

Bullitt County emissions are zero in Table 3-14 because it has a point source whose emissions are included in the point source data and have to be subtracted from the area source calculations.

3.4.2.5 Cutback Asphalt Paving

Cutback asphalt is a type of liquefied road surface that is prepared by blending or "cutting back" asphalt cement with various kinds of petroleum distillates. Cutback asphalt is used as a pavement sealant, tack coat, and as a bonding agent between layers of paving material. VOCs are emitted as the cutback asphalt cures and the petroleum distillates evaporate.

According to federal guidance[1], because paving operations may be generally expected to relate to human activity, a population based approach will provide reasonable emission estimates for this area source category. The emission factor used for this category is as follows.

Cutback Asphalt Paving: 0.37 lb/capita/yr

The activity level was considered to be 5 days per week. The calculations for estimating emissions from this category are as follows.

$TPY = (EF \times population) \times \frac{1\ ton}{(2000\ lbs)}$

$TPD = TPY / (5 \times 52)$

Cutback asphalt emissions are provided in Table 3-12. Population for individual counties is found in Table 3-1.

Table 3-12
Summary of Emissions From
Cutback Asphalt Paving

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	11.80	0.05
Oldham	9.12	0.04
TOTAL	**20.92**	**0.09**

3.4.2.6 Emulsified Asphalt

Emissions from emulsified asphalts were not calculated. Any emissions from this category would have been negligible since emulsified asphalt is water based.

3.4.2.7 Pesticide Application

Pesticides broadly include any substances used to kill or retard the growth of insects, rodents, fungi, weeds, or microorganisms. Pesticides fall into three basic categories: synthetics, nonsynthetics (petroleum products), and inorganics. Formulations are commonly made by combining synthetic materials with various petroleum products. The synthetic pest killing compounds in such formulation are labeled as "active" ingredients, and the petroleum product solvents acting as carriers or diluents for the active ingredients are labeled "inert." Neither of these toxicological designations, active or inert, should be interpreted as indicators of photochemical reactivity; these designations refer only to their toxicological action.

The federal procedures document[1] described an emissions estimation process which requires the quantity and types of pesticides used in a study area. Contacts with both the Kentucky Department of Agriculture[8] and the University of Kentucky[9] revealed that such data is not available.

The Kentucky Division for Air Quality requested the use of an alternative method on September 30, 1989.[10] Since the largest single source of pesticide use is through agricultural application, the alternative method links pesticide application to harvested acreage. Utilizing the alternative method, VOC emissions were determined by multiplying an emission rate of two pounds

of VOC per harvested acre by an area's 2002 harvested acreage.[21] The product was then multiplied by a factor of 0.9 to approximate the amount that evaporated and can be considered photochemically reactive VOC. This alternative method was approved by the U.S. EPA, Region 4 on November 7, 1989.[11] The yearly emissions were then converted to tons emitted per typical summer day in accordance with Section 5.9 of reference 1. The seasonal adjustment factor was 1.3, and the activity days per week was 6. The calculations for estimating emissions for this category are as follows.

$$TPY = ((Harvested\ Acres \times Emission\ Factor(lbs)) \times 0.9) \times \frac{1\ ton}{(2000\ lbs)}$$

$$TPD = (TPY \times SAF) / (6 \times 52)$$

The emissions, by county, produced by pesticide application are shown in Table 3-13. 2002 harvested acre information[21] used to calculate emissions for this category are found in Table 3-14.

Table 3-13
Summary of Emissions From Pesticide Application

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	15.68	0.07
Oldham	19.73	0.08
TOTAL	**35.41**	**0.15**

Table 3-14
2002 Harvested Acres

County	Harvested Acres
Bullitt	17,420
Oldham	21,925
TOTAL	**39,345**

3.4.2.8 Commercial/Consumer Solvent Use

Many commercial/consumer products in common use contain VOCs. Some examples are household and automobile cleaners and polishes. These products have varying VOC content and the quantities used are difficult to estimate; therefore, the resulting VOC emissions are considered to be an area source.

EPA guidance[22, 1] provided the methodology the Division used for calculating the VOC emissions for this area source category. The EPA EIIP[22] per capita emission factor for commercial/consumer solvent use of 7.84 lb/capita/yr includes emissions from household products (cleaners, laundry detergents); personal care products (e.g., toiletries, aerosol products); automotive aftermarket products (e.g., rubbing compounds, windshield washing fluids, polishes and waxes); non-industrial adhesives and sealants; pesticide products (home or business); and miscellaneous products.

Population statistics for all areas examined were obtained from state references.[3,4] Emissions per typical summer day for this area source category were calculated using a federal guidance document.[1] The calculated annual tons of VOC was divided by the product of the number of activity days per week and the number of weeks in a year. For commercial/consumer solvent use, no seasonal adjustment factor was applied since activity was considered uniform year round and the activity days per week were 7. The calculations for estimating emissions from this category are as follows.

$$TPY = \underset{(lbs)}{(EF \times Population)} \times \frac{1\ ton}{(2000\ lbs)}$$

$$TPD = TPY / (7 \times 52)$$

Commercial/Consumer solvent use emissions are provided for individual counties in Table 3-15. Population information for individual areas is provided in Table 3-1.

Table 3-15
Summary of Emissions From
Consumer Solvent Usage

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	250.10	0.69
Oldham	193.30	0.53
TOTAL	**443.40**	**1.22**

3.4.3 Waste Management Practices

The handling and management of solid and liquid waste depends on such factors as the type of waste generated and the form and composition of the waste. The following methods of waste disposal were examined in this inventory:

(1) Publicly Owned Treatment Works (POTW);

(2) Industrial Waste Water Treatment;

(3) Hazardous Waste (TSDFs);

(4) Municipal Landfills; and

(5) Solid Waste Incineration -- On-site Incineration and Open Burning

3.4.3.1 Publicly Owned Treatment Works

Federal guidance indicates that research has shown that approximately 85% of all volatile pollutants discharged to unacclimated wastewater treatment systems are stripped to the ambient air. Additionally, the concentration of volatile organic compounds found in POTW influent has been shown to be directly proportional to the industrial contribution to a POTW.

Federal guidance[1] provided the methodology the division used for calculating the VOC emissions for this area source category. The methodology involves multiplying the following emission factor by the number of gallons of industrial wastewater discharged to a POTW:
1.1×10^{-4} (.000110 lbs. of VOC emitted per gallon of industrial wastewater discharged to a POTW.

The amount of industrial wastewater discharged to a POTW was obtained from the Kentucky Division of Water.[12]

Emissions per typical summer day for this area source category were calculated using federal guidance.[1] The calculated annual tons of VOC was multiplied by an appropriate seasonal adjustment

factor and then divided by the product of the number of activity days per week and the number of weeks in a year. For POTW a seasonal adjustment factor of 1.4 was applied and the number of activity days per week were 7.

$$TPY = \frac{\text{Industrial Wastewater Flow (gallons)} \times \text{EF (lbs)}}{} \times \frac{1 \text{ ton}}{(2000 \text{ lbs})}$$

$$TPD = (TPY \times SAF) / (7 \times 52)$$

POTW VOC emissions are provided for Bullitt and Oldham Counties in Table 3-16. Additionally, total industrial wastewater discharge information to POTW for the nonattainment area is provided in Table 3-17.

Table 3-16
Summary of Emissions From POTW

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	0.24	0.00
Oldham	0.00	0.00
TOTAL	**0.24**	**0.00**

Table 3-17
Industrial Discharge Into POTW

County	POTW (Million Gallons Per Year)
Bullitt	0.01200
Oldham	0.00000
TOTAL	**0.01200**

3.4.3.2 Industrial Wastewater

The first step in estimating emissions from this category was to determine what facilities should be treated as point sources. Radian provided guidance[17] on how to determine what sources should be treated as point sources and what sources could be inventoried as area sources. The

County Business Patterns[5] was used to determine the number of facilities within a given SIC code and the number of employees by facility within that code. In order to determine the number of employees for a particular SIC code a conversion from the NAICS code to the SIC code was completed, since the county business patterns now uses the NAICS code. However, a review of the data indicates that there are no facilities in Bullitt or Oldham Counties with the appropriate NAICS codes. Therefore no emissions are included for this category.

3.4.3.3 Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)

This is a relatively new inventory category. In view of the confusion, and resultant frustration, regarding emission estimates from TSDFs, the Division for Air Quality considered the allowance of one ton of VOC per year per facility in order to report *any* figures for the inventory. However, such a blind apportionment of emissions undermined the intent of the inventory.

Assistance had been requested from Radian, in performing emission calculations for this category. However, in a letter received from Steve McCary, U.S. EPA, Region 4 on November 12, 1992, sufficient guidance is not available to inventory emissions from TSDFs at this time. It is expected that most emissions from these sources will be reported in the point source inventory.

3.4.3.4 Municipal Landfills

VOC emissions are produced from municipal solid waste landfills by three mechanisms: volatilization, chemical reaction, and biological decomposition of liquid and solid compounds into other chemical species. Based on EPA guidance,[1] since Kentucky has an average precipitation level over 23 inches, an emission factor of 13.6 tons of VOC per million tons of refuse in-place plus an additional factor of 2.6 tons per year. No seasonal adjustment was applied since this activity is considered uniform according to *Volume I* guidance.

The amount of refuse in-place at facilities located in the nonattainment area in Kentucky was obtained in a municipal solid waste survey developed by the Kentucky Division for Air Quality.[16]

The calculations used to estimate emissions from this category are as follows.

$$TPY = tons\ of\ municipal\ (solid\ waste) \times \frac{13.6\ tons\ VOC}{1{,}000{,}000\ tons\ of\ waste} \times 2.6$$

$$TSD = TPY / (7 \times 52)$$

A summary of emissions for this category may be found in Table 3-18. The tons of solid waste impounded are found in Table 3-19.

Table 3-18

Summary of Emissions From Municipal Landfills

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	12.54	0.03
Oldham	0.00	0.00
TOTAL	**12.54**	**0.03**

Table 3-19
Tons of Solid Waste In Municipal Landfills

County	Landfill Waste (tons)
Bullitt	354,630
Oldham	0
TOTAL	**354,630**

3.4.3.5 Solid Waste Incineration

Solid waste may consist of any discarded solid materials from industrial, commercial, or residential sources. The materials may be combustible or non-combustible and are often burned to reduce bulk, unless direct burial is either available or practical.

The solid waste disposal category includes on-site refuse disposal by residential, industrial, and commercial/institutional sources. On-site incineration is confined burning of waste leaves, landscape refuse, or other refuse or rubbish. Open burning is the unconfined burning of solid waste material.

3.4.3.5.1 On-Site Incineration

A federal guidance document[1] provides waste generation factors to estimate the tons of solid waste burned in on-site incineration. The amount of waste incinerated by residential, commercial/institutional and industrial sources was multiplied by the appropriate VOC, NO_x, and CO emission factors obtained from a federal reference document.[2]

The waste generation factors for on-site incineration appropriate for Region 4 are: 4 tons per 1000 population per year for residential sources; 23 tons per 1000 population per year for commercial/institutional sources; and 395 tons per 1000 manufacturing employees per year for industrial sources. The emission factors applied for on-site incineration are: 1.7 for VOC, 60 for CO, and 11 for NO_x. The emission factors are in pounds of pollutant per ton of solid waste incinerated.

Population statistics and manufacturing employment information for all areas examined for on-site incineration were obtained from state references.[4,5] Emissions per typical summer day for this area source category were calculated using a federal guidance document.[1] The calculated annual tons of VOC were divided by the product of the number of activity days per week and the number of weeks in a year. For on-site incineration, no seasonal adjustment factor was applied since activity was considered uniform year round and activity days per week were 7. Calculations for estimating emissions from this category are as follows.

Residential

$$TPY = \left(\frac{4\ \text{Tons of waste}}{1000\ \text{pop.}} \times \frac{\text{county pop.}}{}\right) \times EF\ (\text{lbs}) \times \frac{1\ \text{ton}}{2000\ \text{lbs}}$$

$$TSD = TPY / (7 \times 52)$$

Commercial/Institutional

$$TPY = \left(\frac{23\ \text{Tons of waste}}{1000\ \text{pop.}} \times \frac{\text{county pop.}}{}\right) \times EF\ (\text{lbs}) \times \frac{1\ \text{ton}}{2000\ \text{lbs}}$$

$$TSD = TPY / (7 \times 52)$$

Industrial

$$TPY = \left(\frac{395\ \text{tons}}{1000\ \text{mfg in mfg SICs}} \times \#\ \text{employees} \times EF\ (\text{lbs})\right) \times \frac{1\ \text{ton}}{2000\ \text{lbs}}$$

employees 20-39

TSD = TPY / (7 x 52)

On-site incineration emissions are provided for the ozone nonattainment area in Table 3-20. Manufacturing employee information for individual areas is provided in Table 3-21.

Table 3-20
Summary of Emissions From
On-Site Incineration

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Bullitt	2.30	0.01	81.21	0.22	14.89	0.04
Oldham	1.46	0.00	51.66	0.14	9.47	0.03
TOTAL	**3.76**	**0.01**	**132.87**	**0.36**	**24.36**	**0.07**

Table 3-21
Manufacturing Employee Population

County	Manufacturing Employment (Employees)
Bullitt	2,493
Oldham	989
TOTAL	**3,482**

3.4.3.5.2 Open Burning

A federal guidance document[1] provides waste generation factors to estimate the tons of solid waste burned in open burning. The amount of waste burned by residential, commercial/institutional, and industrial sources was multiplied by the appropriate VOC, NO_x, and CO emission factors obtained from a federal reference document.[2] The waste generation factors for open burning appropriate for Region 4 are: 450 tons per 1000 rural population per year for residential sources; 24 tons per 1000 rural population per year for commercial/institutional sources; and 160 tons per 1000 manufacturing employees per year for industrial sources. The emission factors applied for open burning are: 30 for VOC, 85 for CO, and 6 for NO_x. The emission factors are in units of pounds of

pollutant per ton of solid non-agricultural waste burned. For an example of how the above information is utilized for this area source category, please see 3.4.3.5.1 regarding on-site incineration.

Rural population statistics and manufacturing employment information for all areas examined for open burning were obtained from state references.[3,4]

In January 1998, Kentucky adopted revisions to the open burning regulation to prohibit most types of open burning in moderate ozone nonattainment areas within Kentucky during the period of May – September when ozone is most likely. The emission reduction credit taken for this control measure is calculated as 80%. A copy of the regulation outlining this prohibition is included in Appendix F.

Emissions per typical summer day for this area source category were calculated using a federal guidance document.[1] The calculated annual tons of VOC was then divided by the product of the number of activity days per week and the number of weeks in a year. For open burning, no seasonal adjustment factor was applied since activity was considered uniform year round and activity days per week was 7. Emissions for this category were calculated as follows.

For the ozone nonattainment portions of Bullitt and Oldham Counties:

Residential

$$\left(TPY = \frac{(450 \text{ Tons of waste}}{1000 \text{ rural population}} \times \frac{\text{county pop.}}{)} \times EF \right) \times \frac{1 \text{ ton}}{(2000 \text{ lbs})} \times .20 \Bigg) \times \text{county apportionment factor}$$

$TSD = TPY / (7 \times 52)$

Commercial/Institutional

$$\left(TPY = \frac{(24 \text{ Tons of waste}}{1000 \text{ rural population}} \times \frac{\text{county pop.}}{)} \times EF \right) \times \frac{1 \text{ ton}}{(2000 \text{ lbs})} \times .20 \Bigg) \times \text{county apportionment factor}$$

$TSD = TPY / (7 \times 52)$

Industrial

$$\left(TPY = \frac{(160 \text{ tons of employees}}{(1000 \text{ mfg employees}} \times \frac{\text{\# employees in mfg SICs 20-39}}{(lbs))} \times EF \right) \times \frac{1 \text{ ton}}{(2000 \text{ lbs})} \times .20 \Bigg) \times \text{county apportionment factor}$$

$= TPY / (7 \times 52)$

For the rest of Bullitt and Oldham Counties:

Residential

$$TPY = \left(\frac{(450 \text{ Tons of waste}}{1000 \text{ rural population}} \times \frac{\text{county) x EF) x pop.}}{} \right) \times \frac{1 \text{ ton}}{(2000 \text{ lbs})} \times \text{county apportionment factor}$$

$$TSD = TPY / (7 \times 52)$$

Commercial/Institutional

$$TPY = \left(\frac{(24 \text{ Tons of waste}}{1000 \text{ rural population}} \times \frac{\text{county) x EF x pop.}}{} \right) \times \frac{1 \text{ ton}}{(2000 \text{ lbs})} \times \text{county apportionment factor}$$

$$TSD = TPY / (7 \times 52)$$

Industrial

$$TPY = \left(\frac{(160 \text{ tons x \# employees)}}{(1000 \text{ mfg employees}} \times \frac{\text{x EF x in mfg SICs}}{20\text{-}39} \right) \times \frac{1 \text{ ton}}{(\text{lbs})) \ (2000 \text{ lbs})} \times \text{county apportionment factor}$$

$$TSD = TPY / (7 \times 52)$$

Open burning emissions are provided for Bullitt and Oldham Counties in Table 3-22. Manufacturing employee information is provided in Table 3-21 and rural population information is provided in Table 3-23.

Table 3-22
Summary of Emissions From
Open Burning of Solid Waste

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Bullitt	112.02	0.31	317.39	0.87	22.40	0.06
Oldham	74.56	0.20	211.24	0.58	14.91	0.04
TOTAL	**186.58**	**0.51**	**528.63**	**1.45**	**37.31**	**0.10**

Table 3-23
2002 Rural Population

County	Rural Population
Bullitt	22,604
Oldham	17,145
TOTAL	**39,749**

3.4.4 Small Stationary Source Fossil Fuel Use

The category includes small boilers, furnaces, heaters, and other heating units too small to be considered point sources. A federal guidance document[1] indicates that it may not be worthwhile for an agency to perform the detailed procedures to calculate emissions for this entire fuel combustion category if: (1) its primary concern is updating the VOC inventory and (2) if an existing inventory already includes combustion. Since the division meets the aforementioned conditions it did not calculate emissions for this area source category.

3.4.5 Bioprocess Emissions Sources

Bioprocess emissions sources include those sources whose emissions result from biological processes (e.g. fermentation). Source categories include bakeries, breweries, distilleries, wineries, and silage storage.

3.4.5.1 Bakeries

The methodology used to estimate emissions from bakeries was prepared by Radian Corporation.[18] A review of *County Business Patterns*,[5] provided the number of bakeries listed under retail bakeries (SIC 546) and larger manufacturing bakeries (SIC 2051). For the purposes of this inventory, all bakeries in the county were considered area sources and their emissions were calculated using Radian's guidance. A factor of .155 tons VOC/yr/1000 population was applied to county populations. This activity was considered uniform year round and activity days per week were 6.[1]

The calculations used to determine source emissions from this category are as follows.

$$TPY = \frac{\text{Area Source Emissions}}{\frac{.155 \text{ tons}}{(1000 \text{ pop.})} \times \text{population}} + \text{Point Source Emissions}$$

$$\text{lbs produced} \times EF \times \frac{1 \text{ ton}}{(2000 \text{ lbs})}$$

$$TSD = TPY / (6 \times 52)$$

Bakery emissions are shown in Table 3-24. Population information necessary for calculating these emissions is found in Table 3-1.

Table 3-24
Summary of Emissions From Bakeries

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)
Bullitt	9.89	0.03
Oldham	7.64	0.02
TOTAL	**17.53**	**0.05**

3.4.5.2 Breweries

A review of *County Business Patterns*[5] showed no breweries in the nonattainment area in Kentucky. Therefore, this category was not inventoried.

3.4.5.3 Wineries

Based on EPA guidance,[1] a review of *County Business Patterns*[5] showed no wineries located in the nonattainment area in Kentucky. Therefore, this category was not inventoried.

3.4.5.4 Distilleries

Emissions for this category are included in the point source portion of this inventory.

3.4.5.5 Silage Storage

EPA guidance[1] stated that this was not a required source category. Since emissions from silage would be typically during the winter months, this category was not inventoried.

3.4.6 Other Area Sources

Sources included in this category are miscellaneous combustion sources and leaking underground storage tanks.

3.4.6.1 Miscellaneous Combustion Sources

Several types of fires and burning activities potentially contribute to this subcategory. They are as follows:

(1) Forest Fires;

(2) Slash Burning and Prescribed Burning;

(3) Agricultural Burning;

(4) Structure Fires; and,

(5) Orchard Heaters.

The division calculated emissions for forest fires and structure fires. The remaining miscellaneous combustion activities were found not to be widespread in Kentucky and therefore were not addressed.

3.4.6.1.1 Forest Fires

A federal guidance document[1] provided the methodology the division used for calculating emissions for this area source category. This methodology involves estimating the amount of material consumed by multiplying the number of acres burned in each area examined by a fuel loading factor (i.e., material consumed per acre of land burned). A fuel loading factor of 6.6 tons of material consumed per acre burned and the number of acres burned in each area examined was obtained from the Kentucky Division of Forestry.[13] Appropriate emission factors from a federal reference document[2] are: 24 for Total Hydrocarbons (THC), 140 for CO, and 4 for NO_x. However, according to another federal reference document,[14] only 79.71 percent of the THC emissions derived from the above THC emission factor are reactive. Therefore, the VOC emission factor utilized for this area source category was 19.13. This VOC emission factor information is based on information derived from a federal reference document.[15] The emission factors are in units of pounds per ton of material burned.

Emissions per typical summer day for this area source category were calculated using a

federal guidance document.[1] The calculated annual tons of VOC emissions was divided by the product of the number of activity days per week and the number of weeks in a year. For forest fires no seasonal adjustment factor was applied since activity was considered uniform year round and the activity days per week was 7. The calculations used to determine emissions from this category are as follows.

$$TPY = (\#\ of\ Acres\ Consumed\ (per\ County) \times Tons\ of\ Growth)\ per\ Acre\ consumed) \times \frac{EF}{(lbs)} \times \frac{1\ ton}{(2000\ lbs)}$$

$$TSD = TPY / (7 \times 52)$$

Forest fire emissions are provided in Table 3-25. Additionally, acreage burned for individual areas is provided in Table 3-26.

Table 3-25
Summary of Emissions From
Forest Fires

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Bullitt	0.69	0.00	5.08	0.01	0.15	0.00
Oldham	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	**0.69**	**0.00**	**5.08**	**0.01**	**0.15**	**0.00**

Table 3-26
2002 Acreage Burned By Forest Fires

County	Forest Fires Acres Burned
Bullitt	11
Oldham	0
TOTAL	**11**

3.4.6.1.2 Structure Fires

Federal guidance[1] provided the methodology the division used for calculating emissions for this area source category. This methodology involves estimating the amount of material consumed

by multiplying the number of structure fires occurring in each area examined by a fuel loading factor (i.e., material consumed per structure fire). A fuel loading factor of 6.8 tons of material consumed per fire was provided in a federal guidance document[1] and information on the number of structure fires which occurred in Kentucky in 2002 was derived by assuming an average of 6 fires per 1000 population in an area in accordance with Volume I guidance. Based on federal guidance,[1] the emission factors applied are: 11 for VOC, 60 for CO, and 1.4 for NO_x. The emission factors are in units of pounds per ton of material burned.

Emissions per typical summer day for this area source category were calculated using federal guidance.[1] The calculated annual tons of VOC emissions were divided by the product of the number of activity days per week and the number of weeks in a year. For structure fires no seasonal adjustment factor was applied since activity was considered uniform year round and the activity days per week were 7. The calculations used to estimate emissions from this category are as follows.

$$TPY = \left(\frac{6\ fires}{1000\ pop.} \times population\right) \times \left(6.8\ tons\ of\ material\ burned\ per\ fire\right) \times \left(EF\ (lbs)\right) \times \left(\frac{1\ ton}{2000\ lbs}\right)$$

$$TSD = TPY / (7 \times 52)$$

Structure fire emissions are provided in Table 3-27. The data used to calculate these emissions is located in Table 3-28.

Table 3-27
Summary of Emissions From
Structure Fires

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Bullitt	14.32	0.04	78.13	0.21	1.82	0.01
Oldham	11.07	0.03	60.38	0.17	1.41	0.00
TOTAL	**25.39**	**0.07**	**138.51**	**0.38**	**3.23**	**0.01**

Table 3-28
Number of Structure Fires

County	Number of Structure Fires
Bullitt	383
Oldham	296
TOTAL	**679**

3.4.6.1.3 Slash Burning and Prescribed Burning

Information received from the Kentucky Division of Forestry[19] revealed that these activities are not widespread in Kentucky and emissions for this category were not inventoried.

3.4.6.1.4 Agricultural Burning

Information received from the Kentucky Division of Forestry[19] showed that this is not a widespread practice in Kentucky and emissions for this category were not inventoried.

3.4.6.1.5 Orchard Heaters

The use of orchard heaters is not common in Kentucky. Therefore, this category was not inventoried.

3.4.6.2 Leaking Underground Storage Tanks

Leaking underground storage tanks typically do not become quantifiable sources of VOC air emissions until excavation and remediation efforts are initiated. Remediation efforts vary widely depending upon the type of contaminant, magnitude of the leak and the extent of groundwater contamination, if any.

Information obtained from the Division of Waste Management shows no leaking underground storage tank remediation,[20] therefore no emissions were calculated.

Table 3-29
Summary of Area Source Emissions

Bullitt County

Source Category	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Gasoline Breathing	32.27	0.10				
Gasoline Transit	1.94	0.01				
Total Gas Unloading	181.53	0.63				
Total Air Refueling	0.00	0.00				
Solvent Dry Cleaning	35.09	0.13				
Surface Cleaning Degreasing	105.62	0.35				
Architectural Surface Coating	146.74	0.52				
Auto Refinishing	73.37	0.28				
Traffic Markings	15.95	0.06				
Graphic Arts	0.00	0.00				
Cutback Asphalt Paving	11.80	0.05				
Pesticide Application	15.68	0.07				
Commercial/Consumer Use	250.10	0.69				
POTW	0.24	0.00				
Industrial Wastewater	0.00	0.00				
Municipal Landfills	12.54	0.03				
Total Onsite Incineration	2.30	0.01	81.21	0.22	14.89	0.04
Total Open Burning	112.02	0.31	317.39	0.87	22.40	0.06
Bakeries	9.89	0.03	0.00	0.00	0.00	0.00
Forest Fires	0.69	0.00	5.08	0.01	0.15	0.00
Structure Fires	14.32	0.04	78.13	0.21	1.82	0.01
Leaking Underground Storage Tanks	0.00	0.00	0.00	0.00	0.00	0.00
Grand Total Area Emissions	**1022.09**	**3.31**	**481.81**	**1.31**	**39.26**	**0.11**

Table 3-30
Summary of Area Source Emissions

Oldham County

Source Category	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Gasoline Breathing	16.55	0.05				
Gasoline Transit	1.24	0.00				
Total Gas Unloading	85.48	0.29				
Total Air Refueling	0.00	0.00				
Solvent Dry Cleaning	27.12	0.10				
Surface Cleaning Degreasing	81.63	0.26				
Architectural Surface Coating	113.41	0.41				
Auto Refinishing	56.71	0.22				
Traffic Markings	12.33	0.05				
Graphic Arts	32.05	0.12				
Cutback Asphalt Paving	9.12	0.04				
Pesticide Application	19.73	0.08				
Commercial/Consumer Use	193.30	0.53				
POTW	0.00	0.00				
Industrial Wastewater	0.00	0.00				
Municipal Landfills	0.00	0.00				
Total Onsite Incineration	1.46	0.00	51.66	0.14	9.47	0.03
Total Open Burning	74.56	0.20	211.24	0.58	14.91	0.04
Bakeries	7.64	0.02	0.00	0.00	0.00	0.00
Forest Fires	0.00	0.00	0.00	0.00	0.00	0.00
Structure Fires	11.07	0.03	60.38	0.17	1.41	0.00
Leaking Underground Storage Tanks	0.00	0.00	0.00	0.00	0.00	0.00
Grand Total Area Emissions	**743.40**	**2.40**	**323.28**	**0.89**	**25.79**	**0.07**

Table 3-31
Summary of Area Source Emissions

Bullitt and Oldham Counties

Source Category	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Gasoline Breathing	48.82	0.15				
Gasoline Transit	3.18	0.01				
Total Gas Unloading	267.01	0.92				
Total Air Refueling	0.00	0.00				
Solvent Dry Cleaning	62.21	0.23				
Surface Cleaning Degreasing	187.25	0.61				
Architectural Surface Coating	260.15	0.93				
Auto Refinishing	130.08	0.50				
Traffic Markings	28.28	0.11				
Graphic Arts	32.05	0.12				
Cutback Asphalt Paving	20.92	0.09				
Pesticide Application	35.41	0.15				
Commercial/Consumer Use	443.40	1.22				
POTW	0.24	0.00				
Industrial Wastewater	0.00	0.00				
Municipal Landfills	12.54	0.03				
Total Onsite Incineration	3.76	0.01	132.87	0.36	24.36	0.07
Total Open Burning	186.58	0.51	528.63	1.45	37.31	0.10
Bakeries	17.53	0.05	0.00	0.00	0.00	0.00
Forest Fires	0.69	0.00	5.08	0.01	0.15	0.00
Structure Fires	25.39	0.07	138.51	0.38	3.23	0.01
Leaking Underground Storage Tanks	0.00	0.00	0.00	0.00	0.00	0.00
Grand Total Area Emissions	**1765.49**	**5.71**	**805.09**	**2.20**	**65.05**	**0.18**

3.5 REFERENCES FOR SECTION 3

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4.0 NON-HIGHWAY EMISSIONS

4.1 INTRODUCTION

This section documents the development of the 2002 nonroad emissions inventory for the Kentucky portion of the Louisville 8-hour ozone nonattainment area (i.e., Bullitt and Oldham Counties). Nonroad sources include motorized vehicles and equipment, which are normally not operated on public roadways to provide transportation. The study and regulation of nonroad emission sources were mandated by the Clean Air Act Amendments of 1990.

4.2 METHODOLOGY AND APPROACH

Nonroad emissions were calculated in accordance with EPA's Mobile Volume IV[1] and EPA's National Emissions Inventory (NEI) development guidance[5]. For this inventory, nonroad emissions have been divided into three categories. Separate emission categories include aircraft, locomotives, and other nonroad (i.e., Non-Highway) sources. Methodologies for each of these categories are discussed separately.

4.3 SUMMARY OF EMISSIONS

Table 4-1 summarizes the inventory results for the other nonroad (i.e., Non-Highway) source emissions. Tables 4-2 and 4-3 summarize emissions from aircrafts. Tables 4-5 and 4-6 summarize emissions from locomotives. Table 4-8 summarizes emissions from all non-highway mobile emission categories.

4.4 DISCUSSION OF NONROAD CATEGORIES

4.4.1 Other Nonroad (i.e., Non-Highway) Sources

Emissions for the other nonroad source categories (e.g., construction and agricultural equipment) were estimated using EPA's Nonroad Model (Core Model Version 2005a, February 2006) in accordance with EPA Region 4 direction[6] and EPA's NEI guidance[5]. As for inputs for the nonroad model RVP and temperature information was provided in accordance with EPA Volume IV guidance[1] and EPA Region 4 direction[6] (*See Appendix C for nonroad model output and Appendix D for more information on temperature determinations*).

The model provided county level ton per day (tpd) emission estimates for base year 2002 and

for the projection years of 2008, 2009, and 2018.

The emissions for this category are provided in Table 4-1.

Table 4-1
Summary of Emissions
Other Non-Highway Mobile Sources

County	Daily VOC Emissions (tons/day)	Daily CO Emissions (tons/day)	Daily NOx Emissions (tons/day)
Bullitt	1.67	11.61	1.21
Oldham	1.58	16.54	1.39
TOTAL	**3.25**	**28.15**	**2.60**

4.4.2 Aircraft Emissions

Emissions from aircraft have not been determined since neither Bullitt nor Oldham Counties have an airport.

4.4.3 Locomotives

Emissions for railroad locomotives within Bullitt and Oldham Counties were calculated based upon December 1997 line haul and yard emission factors[5]. EPA utilized these same emission factors in developing locomotive emissions for the 1999 National Emissions Inventory (NEI)[5]. EPA provided guidance to the Division in utilizing the newer locomotive emission factors[8].

Railroad locomotives used in the United States are primarily of two types: electric and diesel-electric. Electric locomotives are powered by electricity generated at stationary power plants and distributed by either a third rail or overhead catenary system. Emissions are produced only at the electrical generation plant, which is considered a point source and therefore not of interest here. Diesel-electric locomotives, on the other hand, use a diesel engine and an alternator or generator to produce the electricity required to power its traction motors. Emissions produced by these diesel engines are of interest in the non-highway emission inventory development. Emissions for hydrocarbons (HC), carbon monoxide (CO), oxides of nitrogen (NOx), sulfur dioxide (SO_2), and particulate matter (PM) from this source are covered in this chapter.

Railroads can be separated into three classes based on size: Class I, Class II, and Class III.

Class I railroads represent the largest railroad systems in the country. Because of their size, Class I railroads operate over a large geographic area. Also, they carry most of the interstate freight and carry most of the passenger service. They are required to keep detailed records of their operations and to report yearly to the Interstate Commerce Commission (ICC).

Class II and III railroads represent the remainder of the rail transportation system and generally operate within smaller, localized areas. These smaller railroads are not subject to the same reporting requirements, and their record-keeping may be less extensive. Also, their fleet of locomotives tends to be older, with the Class I railroads buying almost all of the new locomotives.

Locomotives within each of the Classes can perform two different types of operations: line haul and yard (or switch). Line haul locomotives generally travel between distant locations, such as from one city to another. Yard locomotives are primarily responsible for moving rail cars within a particular railway yard.

Overview of Recommended Inventory Methodology

4.4.3.1 Line Haul Locomotives

For Class I, II, and III line haul locomotives, emissions were calculated by multiplying the amount of fuel consumed in the inventory area by the appropriate emission factors.

Line Haul Locomotive

Inventory Area Emissions = Fuel Consumption x Emission Factors Fuel Consumption

Line haul locomotive fuel consumption information for Bullitt and Oldham Counties was supplied directly to the Division for Air Quality pursuant to a Division railroad questionnaire that was provided in July 2003 to all railroads operating in the ozone nonattainment area *(Please see a copy of the 2002 railroad questionnaire which is included in Appendix G)*. The questionnaire also requested information regarding the number of yard locomotives operating in the nonattainment county.

Emission Factors - Line Haul

With the line haul fuel consumption information obtained from the questionnaire, emissions were determined by multiplying that value by the fleet average emission factors for each pollutant (converted to pounds per gallon of fuel burned (lbs/gal)). The EPA recommended default emission factors[8] that were utilized for all line haul locomotives are as follows.

Line Haul Locomotive Emission Factors

Pollutant	Emission Factor (g/gal)
HC	10
CO	26.6
NOx	270
PM	6.7

* g/gal emission factors converted to lbs/gal by multiplying the g/gal emission factor by .0022046.

4.4.3.2 Yard Locomotives

No yard locomotives were identified in the questionnaire, therefore no emissions were calculated.

Seasonal Considerations Line and Yard Locomotives

Based on consultation with James Hou[2], Region 4 EPA, during March 2006 and Volume IV guidance[1], activity for railroad locomotives is considered to be uniform throughout the year. Additionally, the number of days of operation was assumed to be 365. Therefore, typical summer day emissions for line haul and yard locomotives were derived by using the following equation.

Typical Summer Day Emissions (TSD) = Annual Locomotive Emissions (TYR) / 365 days

Converting from Total Hydrocarbons (THC) to Volatile Organic Compounds (VOC) For Line and Yard Locomotives

In accordance with Volume IV guidance, the following THC to VOC conversion factor was used to determine the VOC emissions for line and yard locomotives.

VOC Locomotive = THCFID Locomotive x 1.005

Emissions for line haul locomotives are provided in Table 4-2. Activity data (i.e., fuel consumed) used to calculate locomotive emissions can be found in Table 4-3. Total Non-Highway emissions are provided in Table 4-4 through Table 4-6.

Table 4-2
Summary of Emissions From Line Haul Locomotives

County	Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Bullitt	8.10	0.02	21.43	0.06	217.49	0.60
Oldham	3.20	0.01	8.48	0.02	86.06	0.24
TOTAL	**11.30**	**0.03**	**29.91**	**0.08**	**303.55**	**0.84**

Table 4-3
Locomotive Fuel Information

County	Line Haul Locomotive Fuel (Gallons)	Yard Locomotive Fuel (Gallons)
Bullitt	730,755	0
Oldham	289,165	0
TOTAL	**1,019,920**	**0**

Table 4-4
Summary of Emissions From Non-Highway Mobile Sources
Bullitt County

Category	**Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	**Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	**Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Other Non-Highway	0.00	1.67	0.00	11.61	0.00	1.21
Locomotive	8.10	0.02	21.43	0.06	217.49	0.60
Aircraft	0.00	0.00	0.00	0.00	0.00	0.00
	8.10	**1.69**	**21.43**	**11.67**	**217.49**	**1.81**

**Annual other non-highway emissions not reflected in Table 4-4.

Table 4-5
Summary of Emissions From Non-Highway Mobile Sources
Oldham County

Category	**Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	**Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	**Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Other Non-Highway	0.00	1.58	0.00	16.54	0.00	1.39
Locomotive	3.20	0.01	8.48	0.02	86.06	0.24
Aircraft	0.00	0.00	0.00	0.00	0.00	0.00
	3.20	**1.59**	**8.48**	**16.56**	**86.06**	**1.63**

**Annual other non-highway emissions not reflected in Table 4-5.

Table 4-6
Summary of Emissions From Non-Highway Mobile Sources
Bullitt and Oldham Counties

Category	**Annual VOC Emissions (tons/year)	Daily VOC Emissions (tons/day)	**Annual CO Emissions (tons/year)	Daily CO Emissions (tons/day)	**Annual NOx Emissions (tons/year)	Daily NOx Emissions (tons/day)
Other Non-Highway	0.00	3.24	0.00	28.15	0.00	2.60
Locomotive	11.30	0.03	29.91	0.08	303.55	0.84
Aircraft	0.00	0.00	0.00	0.00	0.00	0.00
	11.30	**3.27**	**29.91**	**28.23**	**303.55**	**3.44**

**Annual other non-highway emissions not reflected in Table 4-6.

4.5 REFERENCES FOR SECTION 4

1. U.S. Environmental Protection Agency, Procedures for the Emission Inventory Preparation, Volume IV: Mobile Sources, EPA-450/4-81-026d (Revised), U.S. EPA, Office of Mobile Sources, Ann Arbor, MI and Office of Air Quality Planning & Standards, RTP, NC, 1992.

2. E-mail communication, James Hou, US EPA, Region 4, to Joe Forgacs, Kentucky Division for Air Quality concerning procedures for inventorying other nonroad engine categories, March 6, 2006.

3. U.S. Department of Transportation, Federal Aviation Administration, Airport Activity Statistics of Certificated Route Air Carriers for 2000, Office of Management Systems, Washington, DC 20591.

4. Kentucky Transportation Cabinet, Aeronautics Division - 2002 Airport Master Records were obtained for general aviation, air taxi, and military aircraft.

5. U.S. Environmental Protection Agency, National Emissions Inventory (NEI) for 1999.

6. Communications with Dale Aspy, EPA Region 4, regarding nonroad emission inventory development, Summer and Fall 2002.

7. Communications with Dale Aspy, EPA Region 4, and Ken Petche, EPA OMS, regarding aircraft emission inventory development, Fall 2002.

8. Communications with Dale Aspy, EPA Region 4, and Chuck Moulis, EPA OMS, regarding locomotive emission inventory development, Fall 2002.

5.0 HIGHWAY VEHICLES

5.1 INTRODUCTION

This section documents the development of the 2002 highway mobile source emissions inventory for the Kentucky portion of the Louisville 8-hour ozone nonattainment area, which includes Bullitt and Oldham Counties. The inventory addresses highway vehicles using gasoline and diesel. The inventory estimates are for a typical weekday during the summer ozone season (March - October), but more specifically for the summer quarter (i.e., June, July, and August).

The U.S. Environmental Protection Agency in conjunction with Sierra Research, Inc.[1], provided guidance for the preparation of this portion of the inventory.[2]

The Daily Vehicle Miles Traveled (DVMT) data was provided by the Kentucky Transportation Cabinet. Emission factors for highway vehicle classes were obtained from EPA's MOBILE6.2 highway mobile source emission factor estimation model. MOBILE6.2 model runs for the nonattainment area were performed by the Kentucky Division for Air Quality.

The highway vehicles inventory discussion is divided into three primary sections. Section 5.2 addresses the emissions estimation process using the MOBILE6.2 model.[3] Section 5.3 addresses the mobile emissions for Bullitt and Oldham Counties. Mobile source references are found in Section 5.4.

5.2 EMISSIONS ESTIMATION PROCESS

5.2.1 Overview of Highway Vehicle Emissions Estimates

Highway vehicle emission estimates for the nonattainment area were calculated using the DVMT estimates and EPA's mobile source emission factor estimation model - MOBILE6.2. The emission factors produced by the MOBILE6.2 model in grams/mile (g/mile) were multiplied by the DVMT estimates and appropriate unit conversions to generate total emissions. Emission estimates were calculated for VOC, NO_x, and CO. Estimates of VOC emissions were made for vehicle exhaust, evaporative, refueling, resting, and running losses. The only sources of NO_x and CO emissions were vehicle exhaust losses. Highway vehicle emission estimates were calculated for base year 2002 and the projection years of 2005, 2008, 2011, 2014, 2017, and 2020. The agency responsible for agencies principally involved in producing the highway vehicle emission estimates were the Divisions of Planning and Multimodal Programs from the Kentucky Transportation Cabinet

and the Kentucky Division for Air Quality. The Division of Planning provided the following mobile source information for Bullitt and Oldham Counties: (1) Road classifications, 2) Daily Vehicle Miles Traveled per road classification per county; and (3) Estimated average speeds for each road classification. The Division for Air Quality conducted all of the MOBILE6.2 model runs.

The inputs used to run the MOBILE6.2 model are described and presented in Section 5.2.2. Mobile source highway 2002 emissions are summarized in Table 5-1.

5.2.2 Inputs to MOBILE6.2

The chief inputs to the MOBILE6.2 model can be grouped into two main categories: the run section and the scenario section. Unless otherwise specified, national default values are used in the MOBILE6.2 model. The values used for each grouping in the area analysis are presented below and justified (*Please see Appendix D for mobile model input and output information).*

5.2.2.1 Run Section Data

The run section is similar to the one-time data section from the MOBILE5 model. In general, the two main values specified in the run section are the Reid Vapor Pressure for conventional gasoline (identified as "Fuel RVP") and the minimum and maximum summer temperatures. Minimum and maximum summer temperature data will vary depending on the area in Kentucky (*Please see Appendix D for temperature information*).

5.2.2.2 Scenario Section Data

The scenario section of Mobile6.2 allows the specification of data for several parameters that can be varied to evaluate many different mobile source emission scenarios. These parameters are described below:

Scenario Record - This parameter is used to indicate a title. For Kentucky's MOBILE6.2 model runs, the road classification is specified. The 12 road classifications (6 rural, 6 urban) that were used for the MOBILE5 model are also used for the MOBILE6.2 model runs.

Calendar Year - The calendar years for the analysis were 2002, 2008, 2009, and 2018.

Evaluation Month – A value of 7 was used to denote a summer MOBILE6.2 model run.

Average Speed - For each of the highway road classifications, a single speed was applied.

Speed data was supplied by the Kentucky Transportation Cabinet.

In the MOBILE6.2 model, there are four main speed categories: freeway, arterial, local, and ramp. For the 12 road classifications used in Kentucky's MOBILE6.2 model runs, each need to be assigned one of the four speed categories. The 12 road classifications are broken down into 3 freeway road classifications, 8 arterial road classifications, and 1 local road classification. It should be noted that Rural Local has a speed category of Arterial, as advised by EPA.

Specific default speed data are used for specific speed categories. Unless specific local speeds are available, the default local speed of 12.9 mile per hour is used.

For the average speed component, it should be noted that additional data are indicated for the 3 freeway road classifications.[4] The Daily Vehicle Miles Traveled (DVMT) distribution data are represented with 4 percentages: freeway, arterial, local, and ramp. For freeways, studies estimate that freeway and ramp represent 92% and 8% of all freeway VMT, respectively. Unless local data are available for the freeway category, the user needs to indicate "92.0 0.0 0.0 8.0".

Local data for VMT distribution was used. For example, the VMT distribution may be "92.4 0.0 0.0 7.6". Local data may even indicate that VMT distribution data are not needed for any of the freeway road classifications. The VMT distribution data will not be indicated in the Mobile6.2 input file for a freeway road classification unless DVMT data are associated with it. The Kentucky Transportation Cabinet has supplied local data for VMT distribution for this emissions inventory that is different from the default values of "92.0 0.0 0.0 8.0". Please see *Appendix D* for more-detailed highway mobile input file and DVMT information.

5.3 Summary of Highway Vehicle Emissions

Highway vehicle emission estimates were calculated by multiplying the Mobile6.2 generated emission factors by the DVMT. Typical Summer Day (TSD) emission totals are listed by county and summarized in Table 5-1.

TABLE 5-1
SUMMARY OF HIGHWAY MOBILE SOURCE EMISSIONS
Kentucky Portion of the Louisville Metropolitan Statistical Area

	Highway Mobile Source Emissions		
County	Total VOC TSD	Total CO TSD	Total NO_x TSD
Bullitt	3.69	45.82	7.48
Oldham	2.22	26.68	4.36
Total	5.91	72.50	11.84

5.4 REFERENCES FOR SECTION 5

1. Sierra Research, Inc., *MOBILE6 On-Road Motor Vehicle Emissions Model: 5-Day Training Course*, Atlanta, Georgia. February 4-8, 2002.

2. U.S. Environmental Protection Agency. *User's Guide to MOBILE6 – Mobile Source Emission Factor Model.* EPA420-R-02-001. Office of Mobile Sources, Ann Arbor, Michigan. January 2002.

3. U.S. Environmental Protection Agency, Instructions provided with the mobile model - MOBILE6.

4. U.S. Environmental Protection Agency, Dale Aspy, Region 4. Electronic mail correspondence with Joe Forgacs, Kentucky Division for Air Quality. Correction in MOBILE6 model to accurately reflect "Freeway" component. September 9, 2002.

6.0 BIOGENIC EMISSIONS

6.1 BACKGROUND

This section documents the development of the biogenic emissions for the Kentucky portion of the Louisville 8-hour ozone nonattainment area, which includes Bullitt and Oldham Counties. Biogenic emissions are those emissions that are the result of natural processes occurring in vegetation and soils, and marine ecosystems, as a result of geological activity in the form of geysers or volcanoes, as a result of meteorological activity such as lightning, and from fauna, such as ruminants and termites. In accordance with EPA guidance[1], the 2002 biogenic emissions presented were obtained and derived from county-specific biogenic emission estimates that EPA developed to assist states with the Consolidated Emissions Reporting Rule (CERR).

6.2 METHODOLOGY

EPA estimated the biogenic emissions for Kentucky counties using the Biogenic Emissions Inventory System - Version 3 (BEIS3.12). Annual biogenic emissions for Bullitt and Oldham Counties were obtained from the following EPA web site:
ftp://ftp.epa.gov/EmisInventory/prelim2002nei/biogenic/.

Daily biogenic emissions were determined as follows:

Summer Seasonal
Adjustment Factor = (Summer County Emissions (June-August) / Annual County Emissions) / .25

Summer Day Emissions = (Annual County Emissions * Summer Seasonal Adjustment Factor) /365
If applicable, for portions of counties the area apportionment factor provided in Table 1-1 was utilized to apportion emissions.

6.3 SUMMARY OF BIOGENIC EMISSIONS

6.3.1 Ozone Nonattainment Area

Biogenic emissions for Bullitt and Oldham Counties can be found in Table 6-1 and also in *Appendix E.* References for biogenic emissions are provided in Section 6.4.

TABLE 6-1
SUMMARY OF 2002 BIOGENIC EMISSIONS
KENTUCKY PORTION OF THE LOUISVILLE, IN-KY, AREA

COUNTY	VOC EMISSIONS (tons/yr)	VOC EMISSIONS (tons/day)	NOx EMISSIONS (tons/yr)	NOx EMISSIONS (tons/day)
Bullitt	5,435.71	33.81	106.34	0.41
Oldham	3,090.18	19.64	126.51	0.49
Total Emissions	**8,525.89**	**53.45**	**232.85**	**0.90**

6.4 REFERENCES FOR SECTION 6

1. U.S. Environmental Protection Agency. EPA's estimate of 2002 Biogenic Emissions to assist states with the Consolidated Emissions Reporting Rule (CERR). Biogenic annual emission estimates are available at: ftp://ftp.epa.gov/EmisInventory/prelim2002nei/biogenic/. For more information please contact Marc Houyoux, with EPA's Emission Factors and Inventory Group, at (919) 541-3649.

APPENDIX A

Point Source Emissions Inventory Information

2002 Point Source Survey Information

Sample Survey

KENTUCKY DIVISION FOR AIR QUALITY
EMISSIONS INVENTORY SURVEY
FOR CALENDAR YEAR 2000

21

DNumber: 21

Sample Survey

EXINGTON, KY 40511

ttn:

Phone: (859) 243-828

Fax: (859) 243-820

E-mail Address:

roup: 009

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule		
25%	25%	25%	25%	Hrs/Day	Days/Week	Wks/Yr
rocess Unit:				2	1	50

1 PAINT SPRAY BOOTH_____Tons Coating Mix Applied

roup: 016

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule		
25%	25%	25%	25%	Hrs/Day	Days/Week	Wks/Yr
ocess Unit:				24	5	50

C PLTNG/BRNZE PLTNG_____Tons Plated

oup: 017

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule		
25%	25%	25%	25%	Hrs/Day	Days/Week	Wks/Yr
ocess Unit:				24	5	50

TIN PLTNG/RAWSTCK PRETRMT_____Tons Plated

oup: 018

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule		
25%	25%	25%	25%	Hrs/Day	Days/Week	Wks/Yr
ocess Unit:				24	5	50

ZINC PLATING_____Tons Plated

oup: 019

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule		
5%	25%	25%	25%	Hrs/Day	Days/Week	Wks/Yr
ocess Unit:				24	5	50

TIN PLTNG/RAWSTCK PRETRMT_____Tons Plated

Sample Survey

KENTUCKY DIVISION FOR AIR QUALITY
EMISSIONS INVENTORY SURVEY
FOR CALENDAR YEAR 2000
21

:5

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule		
25%	25%	25%	25%	Hrs/Day	Days/Week	Wks/Yr
ocess Unit:				24	7	52

4 BOILERS, 22.5 MMBTU-ECH_____Million Cubic Feet Burned
#2 FUEL-STANDBY_____1000 Gallons Burned_____% ASH _____% SULFUR

oup: 026

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule		
5%	25%	25%	25%	Hrs/Day	Days/Week	Wks/Yr
cess Unit:				24	6	50

CHROMATE WASTE WATERTREAT_____Tons Product

up: 027

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule		
5%	25%	25%	25%	Hrs/Day	Days/Week	Wks/Yr
ess Unit:				24	6	50

WASTE WATER TREAT_____Tons Product

)3

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule		
5%	25%	25%	25%	Hrs/Day	Days/Week	Wks/Yr
ess Unit:				24	6	50

BONDAL BRONZE ELEC. PLAT._____Tons Plated

up: 029

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule		
5%	25%	25%	25%	Hrs/Day	Days/Week	Wks/Yr
ess Unit:				18	5	50

ELECTRODER PRETREATMENT_____Tons Processed

up: 030

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule		
%	25%	25%	25%	Hrs/Day	Days/Week	Wks/Yr
ess Unit:				18	5	50

ELEC DEPOS WASH TUNNEL_____Tons Processed

p: 031

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule		
%	25%	25%	25%	Hrs/Day	Days/Week	Wks/Yr
ss Unit:				18	5	50

POST RINSE_____Gallons Of Coating

Group: 032

Process Unit:	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule Hrs/Day	Days/Week	Wks/Yr
	25%	25%	25%	25%	18	5	50

1 BAKE OVEN_____Gallons Of Coating

Group: 033

Process Unit:	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule Hrs/Day	Days/Week	Wks/Yr
	25%	25%	25%	25%	18	5	50

1 BAKE OVEN_____Gallons Of Coating

Group: 036

Process Unit:	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule Hrs/Day	Days/Week	Wks/Yr
	25%	25%	25%	25%	24	6	50

1 MOLDING DEPARTMENT_____Tons Processed

Group: 037

Process Unit:	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule Hrs/Day	Days/Week	Wks/Yr
	25%	25%	25%	25%	16	5	50

1 2 THERMOPLASTIC MOLDERS_____Tons Product

Group: 038

Process Unit:	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule Hrs/Day	Days/Week	Wks/Yr
	25%	25%	25%	25%	24	5	50

SLUDGE DRYER_____Gallons
HEAT SOURCE/SLUDGE DRYER_____Million Cubic Feet Burned

Group: 088

Process Unit:	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Operating Schedule Hrs/Day	Days/Week	Wks/Yr
	25%	25%	25%	25%	24	7	50

HOT ALKALINE DIP_____Tons Plated
ELECTROCLEAN_____Tons Plated

Sample Survey

KENTUCKY DIVISION FOR AIR QUALITY
EMISSIONS INVENTORY SURVEY
FOR CALENDAR YEAR 2000
21

p 39

Operating Schedule

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
25%	25%	25%	25%	24	7	52

ocess Unit:

NITRIC ACID STRIP_____Tons Plated
NITRIC ACID STRIP_____Tons Plated
ALUMINUM SOAK CLEANER_____Tons Plated
ALUMINUM ETCH CLEANER_____Tons Plated

oup: 090

Operating Schedule

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
25%	25%	25%	25%	24	7	52

ocess Unit:

ALUMINUM DEOXIDIZER_____Tons Plated
ACID DIP_____Tons Plated
BONDAL CF_____Tons Plated
BONDAL CF_____Tons Plated

oup: 091

Operating Schedule

Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Week	Wks/Yr
2	25%	25%	25%	24	7	52

oc Unit:

TIN PLATERS_____Tons Plated
TIN PLATERS_____Tons Plated
COPPER PLATERS_____Tons Plated
COPPER PLATERS_____Tons Plated

reby certify that the information contained on the proceeding pages (number 1 through 4) and on the ached printout is accurate to the best of my knowledge. I understand that this information will be used to calculate l emission fee.

_____, *Company Official*

_____, *Official Title*

_____, *Date of Signature*

r to the attached printout for more detailed information, such as control equipment and emission factors.

ttached printout is an informational copy; do not return it with this survey form. Please make a copy of this survey form to keep our records, and return the original in the enclosed envelope.

any questions regarding any of the data contained in the printout or this survey form, please contact Diana Hogan, na Moore, Kim Gray, Steve Hagedorn, or Andrea Wilson at (502) 573-3382.

Sample Report

KENTUCKY DIVISION FOR AIR QUALITY
KENTUCKY EMMISIONS INVENTORY SYSTEM
DETAILED PLANT INFORMATION

21 AQCR: 102 YEAR OF INVENTORY: 2000 FAYETTE COUNTY

LEXINGTON, KY 40511

PLANT LOCATION

LEXINGTON, KY 40511

Attn:

Phone: (859) 243-828

E-mailAddress:

Fax Number: (859) 243-820

Record Date	UTM Zone	UTM Horiz.	UTM Vert	Owner	Principal Product	Number Of Employees	Area In Acres
9901	16	717.4	4217.2	Facility Not Goverment Owned	ELEC EQUIP	1,500	26

State Plant Classification

X Minor/PTE < all major source levels

SIC Code	SIC Description
3613	Switchgear & Switchboard Apparatus

Program Code

N NSR, No Public Part
0 SIP Source

Program Status

O Operating
O Operating

PLANT EMISSION TOTALS IN TONS PER YEAR

POLLUTANT ID NUMBER	POLLUTANT DESCRIPTION	ACTUAL	UNCONTROLLED	TITLE V PTE	TOTAL POTENTIAL
1310732	SODIUM HYDROXIDE	3.94177	7.808437	20.60584	20.60584
16887006	CHLORIDE	0.0384	0.0384	0.0252	0.0252
1439921	LEAD	0	0	2.33e-4	2.33e-4
	METHANE	0.1524	0.1524	1.18206	1.18206
66...3	PHOSPHORIC ACID	0.01409	0.02738	0.150698	0.150698
664417	HYDROGEN FLUORIDE	0.007746	0.007746	0.088892	0.088892
664939	AMMONIA	0.0528	0.0528	0.1232	0.1232
697372	SULFURIC ACID	7.8802	7.8802	812.1734	812.1734
782505	NITRIC ACID	0.007136	0.014272	0.202964	0.202964
0	CHLORINE	0.06408	0.06408	0.918565	0.918565
AP (SPC)	CARBON MONOXIDE	1.778	1.778	14.08822	14.08822
02	HAZARDOUS AIR POLLUTANTS	0.071826	0.071826	1.00769	1.00769
M10	NITROGEN DIOXIDE	7.112	7.112	56.37286	56.37286
T	PARTICULATE MATTER 10	2.496004	2.803104	7.064387	7.064387
02	TOTAL PARTICULATE MATTER	2.496004	2.803104	7.11989	7.11989
OC	SULFUR DIOXIDE	0.03048	0.03048	2.498396	2.498396
	VOLATILE ORGANIC COMPOUNDS	6.90479	6.90479	20.65978	20.65978

lant Notes:

OMMENTS:

9.167
SPH)

TELEPHONE EXTENSION IS 1653. THIS PER A PHONE CONVERSATION OF JUNE 16, 1989.

LANT BACKGROUND NOTES:

8.326 OPERATIONS SHOWN PREVIOUSLY AS POINTS 1 THRU 5 AND 11 HAVE BEEN MOVED AND THEREFORE ARE ELETED.

ERMIT EVAL & REVIEW NOTES:

).068 POINTS 7 AND 8 WILL CEASE OPERATIONS IN MARCH 1979

AQCR: 102 YEAR OF INVENTORY: 2000 FAYETTE COUNTY

T 34 BOLIERS ACCOUNTED FOR UNDER PT 25.

9.036 C-78-50 REPLACEMENT OF EXISTING PAINT LINE

I SECTION NOTES:

).046 O79-17 7/13/79

).080 APPLICATION FOR OPERATING PERMIT, POINTS 14 AND 15, WAS RECEIVED DECEMBER 11, 1978.

).294 4600 ELECTRODEPOSITION PAINT SYSTEM INSTALLATION.

).004 6984 CONSTRUCTION PERMIT FOR WASTE WATER TREATMENT-SPRAY BOOTH-AND ELECTROPLATING PERATION

).190 B163/ADDITION OF A SLUDGE DRYER.

).274 E583/TRIVIAL ACTIVITY: REPLACEMENT OF A SALT SPRAY CHAMBER. THIS WILL NOT BE ENTERED ON THE S.

ATA PROCESSING NOTES

).121 F559/ PROPOSES THE UPGRADE OF THE PLATING SYSTEM. POINTS 88, 89, 90, 91 ARE TO BE RUCTED AS ADDITIONAL PLATING LINES.

).0 7788/ADDITIONAL INFO REQUESTED, RESPONSE BY 3/17/86

).008 KYD006386056

KENTUCKY DIVISION FOR AIR QUALITY
KENTUCKY EMMISIONS INVENTORY SYSTEM
DETAILED PLANT INFORMATION

21 AQCR: 102 YEAR OF INVENTORY: 2000 FAYETTE COUNTY

SSIONS SUMMARY BY GROUP:

Group Description: POINT 009 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
M10	PARTICULATE MATTER 10	0.00525	0.0525	0.021	0.021	000002		
T	TOTAL PARTICULATE MATTER	0.00525	0.0525	0.021	0.021	000002		
OC	VOLATILE ORGANIC COMPOUNDS	0.169	0.169	0.676	0.676			

Group 16 Group Description: POINT 016 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
664417	AMMONIA	0.0528	0.0528	0.1232	0.1232			
M10	PARTICULATE MATTER 10	0.01077	0.02154	0.02513	0.02513	000005		
T	TOTAL PARTICULATE MATTER	0.01077	0.02154	0.02513	0.02513	000005		

Group 17 Group Description: POINT 017 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
64393	HYDROGEN FLUORIDE	0.000666	0.000666	0.009823	0.009823			
97372	NITRIC ACID	0.006085	0.01217	0.179484	0.179484			
82505	CHLORINE	0.02472	0.02472	0.364595	0.364595			
AP (SPC)	HAZARDOUS AIR POLLUTANTS	0.025386	0.025386	0.374418	0.374418			
	PARTICULATE MATTER 10	0.0543	0.1086	0.800871	0.800871	000011		
	TOTAL PARTICULATE MATTER	0.0543	0.1086	0.800871	0.800871	000011		

Group 8 Group Description: POINT 018 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
10732	SODIUM HYDROXIDE	3.866667	7.733334	13.04952	13.04952			
110	PARTICULATE MATTER 10	0.04688	0.09376	0.079107	0.079107	000008		
	TOTAL PARTICULATE MATTER	0.04688	0.09376	0.079107	0.079107	000008		

Group 9 Group Description: POINT 019 Record Date:

POLLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
64382	PHOSPHORIC ACID	0.01329	0.02658	0.148423	0.148423			
64393	HYDROGEN FLUORIDE	0.00708	0.00708	0.079069	0.079069			
97372	NITRIC ACID	0.001051	0.002102	0.02348	0.02348			
82505	CHLORINE	0.03816	0.03816	0.426171	0.426171			
AP (SPC)	HAZARDOUS AIR POLLUTANTS	0.04524	0.04524	0.50524	0.50524			
110	PARTICULATE MATTER 10	0.10554	0.21108	1.178671	1.178671	000007		
	TOTAL PARTICULATE MATTER	0.10554	0.21108	1.178671	1.178671	000007		

Sample Report

KENTUCKY DIVISION FOR AIR QUALITY
KENTUCKY EMMISIONS INVENTORY SYSTEM
DETAILED PLANT INFORMATION

AQCR: 102 YEAR OF INVENTORY: 2000 FAYETTE COUNTY

roup Description
OINT 025 Record Date

LLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
39921	LEAD	0	0	2.33e-4	2.33e-4			
28	METHANE	0.1524	0.1524	1.18206	1.18206			
	CARBON MONOXIDE	1.778	1.778	14.06822	14.06822			
P (SPC)	HAZARDOUS AIR POLLUTANTS	0	0	2.33e-4	2.33e-4			
2	NITROGEN DIOXIDE	7.112	7.112	56.27286	56.27286			
10	PARTICULATE MATTER 10	0.1524	0.1524	1.237563	1.237563			
	TOTAL PARTICULATE MATTER	0.1524	0.1524	1.293066	1.293066	000004		
2	SULFUR DIOXIDE	0.03048	0.03048	1.355353	1.355353	000011		
C	VOLATILE ORGANIC COMPOUNDS	0.14224	0.14224	1.114357	1.114357			

up Group Description
POINT 026 Record Date

LLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
0732	SODIUM HYDROXIDE	0.064	0.064	6.390035	6.390035			
4939	SULFURIC ACID	4.0672	4.0672	406.0867	406.0867			

Group Description
POINT 027 Record Date

LLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
0	SODIUM HYDROXIDE	0.01095	0.01095	1.166182	1.166182			
4939	SULFURIC ACID	3.813	3.813	406.0867	406.0867			
2505	CHLORINE	0.0012	0.0012	0.127799	0.127799			
(SPC)	HAZARDOUS AIR POLLUTANTS	0.0012	0.0012	0.127799	0.127799			

Group Description
POINT 028 Record Date

LUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
0	PARTICULATE MATTER 10	0.04236	0.08472	0.092768	0.092768	000003		
	TOTAL PARTICULATE MATTER	0.04236	0.08472	0.092768	0.092768	000003		

Group Description
POINT 029 Record Date

LUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
382	PHOSPHORIC ACID	0.0008	0.0008	0.002275	0.002275			
0	PARTICULATE MATTER 10	1.01632	1.01632	2.889906	2.889906	000005		
	TOTAL PARTICULATE MATTER	1.01632	1.01632	2.889906	2.889906	000005		

Group Description
POINT 030 Record Date

LUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
	SODIUM HYDROXIDE	1.53e-4	1.53e-4	1.01e-4	1.01e-4			
	CHLORIDE	0.0384	0.0384	0.0252	0.0252			
	PARTICULATE MATTER 10	0.68	0.68	0.44625	0.44625	000005		
	TOTAL PARTICULATE MATTER	0.68	0.68	0.44625	0.44625	000005		

Sample Report

KENTUCKY DIVISION FOR AIR QUALITY
KENTUCKY EMMISIONS INVENTORY SYSTEM
DETAILED PLANT INFORMATION

21 AQCR: 102 YEAR OF INVENTORY: 2000 FAYETTE COUNTY

Group Description: POINT 031 Record Date:

POLLUTANT ID and DESCRIPTION	ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
VOC VOLATILE ORGANIC COMPOUNDS	0.44785	0.44785	4.099709	4.099709			

Group: 032 Group Description: POINT 032 Record Date:

POLLUTANT ID and DESCRIPTION	ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
VOC VOLATILE ORGANIC COMPOUNDS	0.44785	0.44785	4.099709	4.099709			

Group: 033 Group Description: POINT 033 Record Date:

POLLUTANT ID and DESCRIPTION	ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
VOC VOLATILE ORGANIC COMPOUNDS	0.44785	0.44785	4.099709	4.099709			

Group: 36 Group Description: POINT 036 Record Date:

POLLUTANT ID and DESCRIPTION	ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
OC VOLATILE ORGANIC COMPOUNDS	5.25	5.25	6.565	6.565			

Group: Group Description: POINT 037 Record Date:

POLLUTANT ID and DESCRIPTION	ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
M10 PARTICULATE MATTER 10	0.002	0.002	0.057998	0.057998		000007	
T TOTAL PARTICULATE MATTER	0.002	0.002	0.057998	0.057998		000007	

Group: Group Description: POINT 038 Record Date:

POLLUTANT ID and DESCRIPTION	ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
CARBON MONOXIDE	0	0	0.02	0.02			
N2 NITROGEN DIOXIDE	0	0	0.1	0.1			
M10 PARTICULATE MATTER 10	0	0	0.00453	0.00453		000011	
T TOTAL PARTICULATE MATTER	0	0	0.00453	0.00453		000011	
S2 SULFUR DIOXIDE	0	0	1.143043	1.143043		000011	
VOC VOLATILE ORGANIC COMPOUNDS	0	0	0.0053	0.0053			

Group: Group Description: POINT 088 Record Date:

POLLUTANT ID and DESCRIPTION	ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
M10 PARTICULATE MATTER 10	0.028908	0.028908	0.011511	0.011511			
TOTAL PARTICULATE MATTER	0.028908	0.028908	0.011511	0.011511			

Group: Group Description: POINT 089 Record Date:

POLLUTANT ID and DESCRIPTION	ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
10 PARTICULATE MATTER 10	0.061057	0.061057	0.08364	0.08364			
TOTAL PARTICULATE MATTER	0.061057	0.061057	0.08364	0.08364			

Sample Report

KENTUCKY DIVISION FOR AIR QUALITY
KENTUCKY EMMISIONS INVENTORY SYSTEM
DETAILED PLANT INFORMATION

AQCR: 102 YEAR OF INVENTORY: 2000 FAYETTE COUNTY

roup Description: INT 090 Record Date:

LLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
10	PARTICULATE MATTER 10	0.167404	0.167404	0.080189	0.080189			
	TOTAL PARTICULATE MATTER	0.167404	0.167404	0.080189	0.080189			

roup Group Description: POINT 091 Record Date:

LLUTANT ID and DESCRIPTION		ESTIMATED EMISSIONS (TONS/YR)	EMISSIONS (NO CONTROL) (TONS/YR)	TITLE V PTE (TONS/YR)	TOTAL POTENTIAL (TONS/YR)	PERMIT LIMITATIONS Tons/yr	lbs/hr	PPM
10	PARTICULATE MATTER 10	0.122815	0.122815	0.055253	0.055253			
	TOTAL PARTICULATE MATTER	0.122815	0.122815	0.055253	0.055253			

mpliance Data by Group

roup	Group Description	Program Compliance Status	Program Code	Program Status
	POINT 009	3 In Compliance-Inspection	0 SIP Source	O Operating
	POINT 016	3 In Compliance-Inspection	N NSR, No Public Part	O Operating
		3 In Compliance-Inspection	0 SIP Source	O Operating
	POINT 017	3 In Compliance-Inspection	N NSR, No Public Part	O Operating
		3 In Compliance-Inspection	0 SIP Source	O Operating
	POINT 018	3 In Compliance-Inspection	N NSR, No Public Part	O Operating
		3 In Compliance-Inspection	0 SIP Source	O Operating
	POINT 019	3 In Compliance-Inspection	N NSR, No Public Part	O Operating
		3 In Compliance-Inspection	0 SIP Source	O Operating
	POINT 025	3 In Compliance-Inspection	N NSR, No Public Part	O Operating
		3 In Compliance-Inspection	0 SIP Source	O Operating
	POINT 026	3 In Compliance-Inspection	N NSR, No Public Part	O Operating
		1 In Violation-No Schedule	0 SIP Source	O Operating
	POINT 027	1 In Violation-No Schedule	N NSR, No Public Part	O Operating
		1 In Violation-No Schedule	0 SIP Source	O Operating
	POINT 028	3 In Compliance-Inspection	N NSR, No Public Part	O Operating
		3 In Compliance-Inspection	0 SIP Source	O Operating
	POINT 029	3 In Compliance-Inspection	N NSR, No Public Part	O Operating
		3 In Compliance-Inspection	0 SIP Source	O Operating
	POINT 030	3 In Compliance-Inspection	N NSR, No Public Part	O Operating
		3 In Compliance-Inspection	0 SIP Source	O Operating
	POINT 031	3 In Compliance-Inspection	N NSR, No Public Part	O Operating
		3 In Compliance-Inspection	0 SIP Source	O Operating
	POINT 032	3 In Compliance-Inspection	N NSR, No Public Part	O Operating
		3 In Compliance-Inspection	0 SIP Source	O Operating
	POINT 033	3 In Compliance-Inspection	N NSR, No Public Part	O Operating
		3 In Compliance-Inspection	0 SIP Source	O Operating
	POINT 036	3 In Compliance-Inspection	N NSR, No Public Part	O Operating
		4 In Compliance-Certification	0 SIP Source	O Operating
	POINT 037	4 In Compliance-Certification	N NSR, No Public Part	O Operating
		3 In Compliance-Inspection	0 SIP Source	O Operating
	POINT 038	3 In Compliance-Inspection	N NSR, No Public Part	O Operating
	POINT 088	4 In Compliance-Certification	0 SIP Source	O Operating
		0 Unknown Compliance Status	0 SIP Source	O Operating
	POINT 089	0 Unknown Compliance Status	N NSR, No Public Part	O Operating
		0 Unknown Compliance Status	0 SIP Source	O Operating
	DINT 090	0 Unknown Compliance Status	N NSR, No Public Part	O Operating
		0 Unknown Compliance Status	0 SIP Source	O Operating
	POINT 091	0 Unknown Compliance Status	N NSR, No Public Part	O Operating
		0 Unknown Compliance Status	0 SIP Source	O Operating
		0 Unknown Compliance Status	N NSR, No Public Part	O Operating

Sample Report

KENTUCKY DIVISION FOR AIR QUALITY
KENTUCKY EMMISIONS INVENTORY SYSTEM
DETAILED PLANT INFORMATION

21 AQCR: 102 YEAR OF INVENTORY: 2000 FAYETTE COUNTY

AILS BY GROUP:

Description

Operating Schedule: Hours/Day, Days/Week, Weeks/Year

% Annual Throughput: Dec-Feb, Mar-May, Jun-Aug, Sep-Nov

PROCESS UNIT INFORMATION: Group

Process Number	Site Process Identifier	Fugitive Emissions	Sensitive Data	Source Type	Applicable Regulations	Boiler Capacity mmBTU/hr	Sulfur Content % Sulfur	Ash Content % Ash

STACK INFORMATION:

Stack Number	Stack Description	Stack Height (ft)	Stack Diameter (ft)	Vent Height (ft)	Stack Flow Rate (acfm)	Stack Velocity (ft/sec)	Stack /Vent Temperature (F)

OPERATING INFORMATION:

Process Description

SCC Codes and Description

Construction Date

Log Number

Maximum Hourly Operating Rate (SCC Units/hr)

Annual Process Rate (SCC Units/yr)

Maximum Operation (hrs/yr)

Maximum Operation Limitations

SCC Units

Pollutant Id and Description	Estimated Emissions Method	Emission Factor	Actual Ctrl. Eff.	Abatement Equiptment Code and Description	PTE Ctrl. Eff.	Estimated Emissions (tons/yr)	Emissions (No Control) (tons/yr)	Total Potential Emissions (tons/yr)	Permit Limits (tons/yr

Sample Report

KENTUCKY DIVISION FOR AIR QUALITY
KENTUCKY EMMISIONS INVENTORY SYSTEM
DETAILED PLANT INFORMATION

2002 Point Source Emissions Bullitt and Oldham Counties

2002 Base Year Point Source Emissions					
			2002 Baseyear (in tpd)		
FACILITY NAME	**Plant I.D. #**	**SIC Code**	**VOC tpd**	**CO tpd**	**NOx tpd**
KENTUCKY SOLITE CORP	21-029-00002	3295	0.13	0.10	0.32
JOSEPH SEAGRAM & SONS INC	21-029-00004	2085	3.33	0.00	0.00
JIM BEAM BRANDS CO	21-029-00005	2084	3.75	0.07	0.24
PUBLISHERS PRINTING CO	21-029-00019	2721	0.17	0.00	0.00
PUBLISHERS PRINTING CO	21-029-00032	2721	0.40	0.00	0.00
BULLITT COUNTY TOTAL			**7.78**	**0.17**	**0.56**
NEXANS MAGNET WIRE INC	21-185-00004	3357	0.55	0.01	0.01
OLDHAM COUNTY TOTAL			**0.55**	**0.01**	**0.01**
BULLITT AND OLDHAM TOTALS			**8.33**	**0.18**	**0.57**

2002 CO Point Source Emissions – Bullitt and Oldham Counties

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00002 MASAINAME=KY Solite Corp ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
1	CO	2102900002	029	00002	001	2	39000699	1.000000000000	0	80	1.000000000000	N
2	CO	2102900002	029	00002	002	2	39000699	1.000000000000	0	80	1.000000000000	N
3	CO	2102900002	029	00002	002	3	39001389	1.000000000000	0	80	1.000000000000	N
4	CO	2102900002	029	00002	003	1	30502910	1.000000000000	0	80	1.000000000000	N
5	CO	2102900002	029	00002	003	3	39000699	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
1	N	1	1	0.0	F	25	7	52	0.000	20.000000000000	0.00	0.00
2	N	1	1	0.1	F	25	7	52	0.000	20.000000000000	0.00	0.00
3	N	1	1	0.0	F	25	7	52	0.000	5.000000000000	0.00	0.00
4	N	1	1	94304.0	F	35	7	52	362.708	0.600000000000	28.29	0.11
5	N	1	1	54.8	F	35	7	52	0.211	84.000000000000	2.30	0.01
											30.59	0.12
											30.59	0.12

MASAINAME
plant_id

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00005 MASAINAME=Jim Beam Brands Co - Clermont Plant ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
6	CO	2102900005	029	00005	003	2	39000689	1.000000000000	0	80	1.000000000000	N
7	CO	2102900005	029	00005	003	3	39001099	1.000000000000	0	80	1.000000000000	N
8	CO	2102900005	029	00005	007	1	10200602	1.000000000000	0	80	1.000000000000	N
9	CO	2102900005	029	00005	007	2	10200501	1.000000000000	0	80	1.000000000000	N
10	CO	2102900005	029	00005	007	3	10200401	1.000000000000	0	80	1.000000000000	N
11	CO	2102900005	029	00005	008	1	10200204	1.000000000000	0	80	1.000000000000	N
12	CO	2102900005	029	00005	008	2	10200602	1.000000000000	0	80	1.000000000000	N
13	CO	2102900005	029	00005	009	1	10200602	1.000000000000	0	80	1.000000000000	N
14	CO	2102900005	029	00005	009	2	10200501	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
6	N	1	1	79.65	F	14	6	40	0.1858	35.000000000000	1.39	0.00
7	N	1	1	0.00	F	14	6	40	0.0000	17.000000000000	0.00	0.00
8	N	1	1	0.00	F	8	1	4	0.0000	35.000000000000	0.00	0.00
9	N	1	1	0.00	F	8	1	4	0.0000	5.000000000000	0.00	0.00
10	N	1	1	0.00	F	8	1	4	0.0000	5.000000000000	0.00	0.00
11	N	1	1	13997.00	F	14	6	40	32.6597	5.000000000000	34.99	0.08
12	N	1	1	0.25	F	14	6	40	0.0006	35.000000000000	0.00	0.00
13	N	1	1	8.38	F	25	2	52	0.0805	35.000000000000	0.15	0.00
14	N	1	1	0.00	F	25	2	52	0.0000	5.000000000000	0.00	0.00
											36.53	0.08
											36.53	0.08

MASAINAME
plant_id

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
15	CO	2102900019	029	00019	001	2	39000699	1.000000000000	0	80	1.000000000000	N
16	CO	2102900019	029	00019	002	2	39000699	1.000000000000	0	80	1.000000000000	N
17	CO	2102900019	029	00019	003	2	39000699	1.000000000000	0	80	1.000000000000	N
18	CO	2102900019	029	00019	004	4	39000699	1.000000000000	0	80	1.000000000000	N
19	CO	2102900019	029	00019	005	4	39000699	1.000000000000	0	80	1.000000000000	N
20	CO	2102900019	029	00019	006	4	39000699	1.000000000000	0	80	1.000000000000	N
21	CO	2102900019	029	00019	007	4	39000699	1.000000000000	0	80	1.000000000000	N
22	CO	2102900019	029	00019	008	4	39000699	1.000000000000	0	80	1.000000000000	N
23	CO	2102900019	029	00019	009	4	39000699	1.000000000000	0	80	1.000000000000	N
24	CO	2102900019	029	00019	010	4	39000699	1.000000000000	0	80	1.000000000000	N

MASAINAME

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
15	N	1	1	3.1	F	25	5	52	0.011923	84.000000000000	0.13	0.00
16	N	1	1	2.2	F	25	5	52	0.008462	84.000000000000	0.09	0.00
17	N	1	1	3.4	F	25	5	52	0.013077	84.000000000000	0.14	0.00
18	N	1	1	0.0	F	25	5	52	0.000000	84.000000000000	0.00	0.00
19	N	1	1	2.7	F	25	5	52	0.010385	84.000000000000	0.11	0.00
20	N	1	1	2.7	F	25	5	52	0.010385	84.000000000000	0.11	0.00
21	N	1	1	2.7	F	25	5	52	0.010385	84.000000000000	0.11	0.00
22	N	1	1	2.4	F	25	5	52	0.009231	84.000000000000	0.10	0.00
23	N	1	1	4.0	F	25	5	52	0.015385	84.000000000000	0.17	0.00
24	N	1	1	1.2	F	25	5	52	0.004615	84.000000000000	0.05	0.00

MASAINAME

1.01	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF

plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND

plant_id

1.01 0.00

---------- POLLN=CO AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
25	CO	2102900032	029	00032	001	4	39000689	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
25	N	1	1	2.58	F	25	5	52	0.009923	84.000000000000	0.11	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
26	CO	2102900032	029	00032	002	4	39000689	1.000000000000	0	80	1.000000000000	N
27	CO	2102900032	029	00032	002	8	39000689	1.000000000000	0	80	1.000000000000	N
28	CO	2102900032	029	00032	002	12	39000689	1.000000000000	0	80	1.000000000000	N
29	CO	2102900032	029	00032	003	4	39000689	1.000000000000	0	80	1.000000000000	N
30	CO	2102900032	029	00032	004	4	39000689	1.000000000000	0	80	1.000000000000	N
31	CO	2102900032	029	00032	005	4	39000689	1.000000000000	0	80	1.000000000000	N
32	CO	2102900032	029	00032	006	4	39000689	1.000000000000	0	80	1.000000000000	N
33	CO	2102900032	029	00032	007	4	39000689	1.000000000000	0	80	1.000000000000	N
34	CO	2102900032	029	00032	007	10	39000689	1.000000000000	0	80	1.000000000000	N
35	CO	2102900032	029	00032	007	14	39000689	1.000000000000	0	80	1.000000000000	N
36	CO	2102900032	029	00032	007	18	39000689	1.000000000000	0	80	1.000000000000	N
37	CO	2102900032	029	00032	008	4	39000689	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
26	N	1	1	0.00	F	25	5	52	0.000000	84.000000000000	0.00	0.00
27	N	1	1	3.38	F	25	5	52	0.013000	84.000000000000	0.14	0.00
28	N	1	1	3.38	F	25	5	52	0.013000	84.000000000000	0.14	0.00
29	N	1	1	3.38	F	25	5	52	0.013000	84.000000000000	0.14	0.00
30	N	1	1	5.40	F	25	5	52	0.020769	84.000000000000	0.23	0.00
31	N	1	1	0.21	F	25	5	52	0.000808	84.000000000000	0.01	0.00
32	N	1	1	5.47	F	25	5	52	0.021038	84.000000000000	0.23	0.00
33	N	1	1	2.36	F	25	5	52	0.009077	84.000000000000	0.10	0.00
34	N	1	1	3.38	F	25	5	52	0.013000	84.000000000000	0.14	0.00
35	N	1	1	0.00	F	25	5	52	0.000000	84.000000000000	0.00	0.00
36	N	1	1	2.81	F	25	5	52	0.010808	84.000000000000	0.12	0.00
37	N	1	1	2.53	F	25	7	52	0.006951	84.000000000000	0.11	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
38	CO	2102900032	029	00032	009	4	39000689	1.000000000000	0	80	1.000000000000	N
39	CO	2102900032	029	00032	010	1	39000689	1.000000000000	0	80	1.000000000000	N
40	CO	2102900032	029	00032	010	2	39001099	1.000000000000	0	80	1.000000000000	N
41	CO	2102900032	029	00032	011	1	39000689	1.000000000000	0	80	1.000000000000	N
42	CO	2102900032	029	00032	011	2	39001099	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id
COUNTYN
cnty_code

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
38	N	1	1	2.53	F	25	7	52	0.006951	84.000000000000	0.11	0.00
39	N	1	1	4.40	F	25	7	52	0.012088	84.000000000000	0.18	0.00
40	N	1	1	9.30	F	25	7	52	0.025549	2.100000000000	0.01	0.00
41	N	1	1	2.59	F	25	7	52	0.007115	84.000000000000	0.11	0.00
42	N	1	1	7.40	F	25	7	52	0.020330	2.100000000000	0.01	0.00
											1.89	0.00
											1.89	0.00
											70.02	0.20
											70.02	0.20

MASAINAME
plant_id
COUNTYN
cnty_code

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00004 MASAINAME=Nexans Magnet Wire Inc ----------

Obs	POLLN	ALTFACID	cnty_code	plant_id	PTID	SEGID	scc	INCFF	CTEFF	REFF	CPROD	EF	CATNY	CATND
43	CO	185	00004	001	2	40201001	1.000000000000	0	80	1.000000000000	N N 1 1 38.13	F 25 7 52 0.10475	84.000000000000	1.60	0.00
44	CO	185	00004	006	1	10200601	1.000000000000	0	80	1.000000000000	N N 1 1 44.93	F 25 7 52 0.12343	84.000000000000	1.89	0.01
45	CO	185	00004	017	2	10500206	1.000000000000	0	80	1.000000000000	N N 1 1 2.66	F 25 7 52 0.00731	84.000000000000	0.11	0.00
46	CO	185	00004	020	3	40201001	1.000000000000	0	80	1.000000000000	N N 1 1 11.82	F 25 7 52 0.03247	84.000000000000	0.50	0.00
														4.10	0.01
														4.10	0.01

MASAINAME
plant_id

---------- POLLN=CO AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------

Obs	POLLN	ALTFACID	cnty_code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
47	CO	2118500012	185	00012	001	1	10300602	1.000000000000	0	80	1.000000000000	N	N	1	1	44.2700	F	25	7	52	0.12162	84.000000000000	1.86	0.01
48	CO	2118500012	185	00012	001	2	10300501	1.000000000000	0	80	1.000000000000	N	N	1	1	2.0000	F	25	7	52	0.00549	5.000000000000	0.01	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
49	CO	2118500012	185	00012	002	1	10300602	1.000000000000	0	80	1.000000000000	N
50	CO	2118500012	185	00012	002	2	10300501	1.000000000000	0	80	1.000000000000	N
51	CO	2118500012	185	00012	003	1	10300602	1.000000000000	0	80	1.000000000000	N
52	CO	2118500012	185	00012	003	2	10300501	1.000000000000	0	80	1.000000000000	N
53	CO	2118500012	185	00012	006	2	39000699	1.000000000000	0	80	1.000000000000	N
54	CO	2118500012	185	00012	007	1	40200801	1.000000000000	0	80	1.000000000000	N
55	CO	2118500012	185	00012	007	2	39000699	1.000000000000	0	80	1.000000000000	N
56	CO	2118500012	185	00012	008	1	10300602	1.000000000000	0	80	1.000000000000	N
57	CO	2118500012	185	00012	008	2	10300501	1.000000000000	0	80	1.000000000000	N
58	CO	2118500012	185	00012	009	1	10300602	1.000000000000	0	80	1.000000000000	N
59	CO	2118500012	185	00012	009	2	10300501	1.000000000000	0	80	1.000000000000	N
60	CO	2118500012	185	00012	010	1	20200102	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
49	N	1	1	44.2700	F	25	7	52	0.12162	84.000000000000	1.86	0.01
50	N	1	1	2.0000	F	25	7	52	0.00549	5.000000000000	0.01	0.00
51	N	1	1	44.2708	F	25	7	52	0.12162	84.000000000000	1.86	0.01
52	N	1	1	2.0000	F	25	7	52	0.00549	5.000000000000	0.01	0.00
53	N	1	1	51.3370	F	25	5	52	0.19745	20.000000000000	0.51	0.00
54	N	1	1	1.0000	F	25	5	52	0.00385	84.000000000000	0.04	0.00
55	N	1	1	51.3370	F	25	5	52	0.19745	20.000000000000	0.51	0.00
56	N	1	1	51.3370	F	25	7	52	0.14104	84.000000000000	2.16	0.01
57	N	1	1	0.0000	F	25	7	52	0.00000	5.000000000000	0.00	0.00
58	N	1	1	51.3370	F	25	7	52	0.14104	84.000000000000	2.16	0.01
59	N	1	1	0.0000	F	25	7	52	0.00000	5.000000000000	0.00	0.00
60	N	1	1	0.0000	F	25	7	26	0.00000	133.000000000000	0.00	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID	cnty_code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
61	CO	2118500012	185	00012	010	2	20200102	1.000000000000	0	80	1.000000000000	N
62	CO	2118500012	185	00012	010	3	20200401	1.000000000000	0	80	1.000000000000	N
63	CO	2118500012	185	00012	010	4	20200102	1.000000000000	0	80	1.000000000000	N
64	CO	2118500012	185	00012	010	5	20200102	1.000000000000	0	80	1.000000000000	N
65	CO	2118500012	185	00012	010	6	20200102	1.000000000000	0	80	1.000000000000	N
66	CO	2118500012	185	00012	010	7	20200102	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id
COUNTYN
cnty_code

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
61	N	1	1	0.0000	F	25	7	26	0.00000	133.000000000000	0.00	0.00
62	N	1	1	0.0000	F	25	7	26	0.00000	108.000000000000	0.00	0.00
63	N	1	1	0.0000	F	25	7	26	0.00000	133.000000000000	0.00	0.00
64	N	1	1	0.0000	F	25	7	26	0.00000	133.000000000000	0.00	0.00
65	N	1	1	0.0000	F	25	7	26	0.00000	133.000000000000	0.00	0.00
66	N	1	1	0.0000	F	25	7	26	0.00000	133.000000000000	0.00	0.00
											---	---
											10.99	0.05
											10.99	0.05
											15.09	0.06
											15.09	0.06

MASAINAME
plant_id
COUNTYN
cnty_code

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
CO PROCESS LEVEL EMISSIONS PER YEAR (CTPY) AND SUMMER DAY (CTND)

---------- POLLN=CO AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID"	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
AREA												
POLLN												

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	CPROD	EF	CATNY	CATND
AREA											85.11	0.26
POLLN											85.11	0.26
											85.11	0.26

2002 NO_2 Point Source Emissions – Bullitt and Oldham Counties

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00002 MASAINAME=KY Solite Corp ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
1	NO2	2102900002	029	00002	001	2	39000699	1.000000000000	0	80	1.000000000000	N
2	NO2	2102900002	029	00002	002	2	39000699	1.000000000000	0	80	1.000000000000	N
3	NO2	2102900002	029	00002	002	3	39001389	1.000000000000	0	80	1.000000000000	N
4	NO2	2102900002	029	00002	003	1	30502910	1.000000000000	0	80	1.000000000000	N
5	NO2	2102900002	029	00002	003	3	39000699	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
1	N	1	1	0.0	F	25	7	52	0.000	100.000000000000	0.00	0.00
2	N	1	1	0.1	F	25	7	52	0.000	100.000000000000	0.01	0.00
3	N	1	1	0.0	F	25	7	52	0.000	20.000000000000	0.00	0.00
4	N	1	1	94304.0	F	35	7	52	362.708	1.900000000000	89.59	0.34
5	N	1	1	54.8	F	35	7	52	0.211	100.000000000000	2.74	0.01
											---	---
											92.34	0.35
											92.34	0.35

MASAINAME
plant_id

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00005 MASAINAME=Jim Beam Brands Co - Clermont Plant ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
6	NO2	2102900005	029	00005	003	2	39000689	1.000000000000	0	80	1.000000000000	N
7	NO2	2102900005	029	00005	003	3	39001099	1.000000000000	0	80	1.000000000000	N
8	NO2	2102900005	029	00005	007	1	10200602	1.000000000000	0	80	1.000000000000	N
9	NO2	2102900005	029	00005	007	2	10200501	1.000000000000	0	80	1.000000000000	N
10	NO2	2102900005	029	00005	007	3	10200401	1.000000000000	0	80	1.000000000000	N
11	NO2	2102900005	029	00005	008	1	10200204	1.000000000000	0	80	1.000000000000	N
12	NO2	2102900005	029	00005	008	2	10200602	1.000000000000	0	80	1.000000000000	N
13	NO2	2102900005	029	00005	009	1	10200602	1.000000000000	0	80	1.000000000000	N
14	NO2	2102900005	029	00005	009	2	10200501	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
6	N	1	1	79.65	F	14	6	40	0.1858	140.000000000000	5.58	0.01
7	N	1	1	0.00	F	14	6	40	0.0000	120.000000000000	0.00	0.00
8	N	1	1	0.00	F	8	1	4	0.0000	140.000000000000	0.00	0.00
9	N	1	1	0.00	F	8	1	4	0.0000	20.000000000000	0.00	0.00
10	N	1	1	0.00	F	8	1	4	0.0000	55.000000000000	0.00	0.00
11	N	1	1	13997.00	F	14	6	40	32.6597	14.000000000000	97.98	0.23
12	N	1	1	0.25	F	14	6	40	0.0006	140.000000000000	0.02	0.00
13	N	1	1	8.38	F	25	2	52	0.0805	140.000000000000	0.59	0.01
14	N	1	1	0.00	F	25	2	52	0.0000	20.000000000000	0.00	0.00
											---	---
											104.17	0.25
											104.17	0.25

MASAINAME
plant_id

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
15	NO2	2102900019	029	00019	001	2	39000699	1.000000000000	0	80	1.000000000000	N
16	NO2	2102900019	029	00019	002	2	39000699	1.000000000000	0	80	1.000000000000	N
17	NO2	2102900019	029	00019	003	2	39000699	1.000000000000	0	80	1.000000000000	N
18	NO2	2102900019	029	00019	004	4	39000699	1.000000000000	0	80	1.000000000000	N
19	NO2	2102900019	029	00019	005	4	39000699	1.000000000000	0	80	1.000000000000	N
20	NO2	2102900019	029	00019	006	4	39000699	1.000000000000	0	80	1.000000000000	N
21	NO2	2102900019	029	00019	007	4	39000699	1.000000000000	0	80	1.000000000000	N
22	NO2	2102900019	029	00019	008	4	39000699	1.000000000000	0	80	1.000000000000	N
23	NO2	2102900019	029	00019	009	4	39000699	1.000000000000	0	80	1.000000000000	N
24	NO2	2102900019	029	00019	010	4	39000699	1.000000000000	0	80	1.000000000000	N

MASAINAME

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
15	N	1	1	3.1	F	25	5	52	0.011923	100.000000000000	0.16	0.00
16	N	1	1	2.2	F	25	5	52	0.008462	100.000000000000	0.11	0.00
17	N	1	1	3.4	F	25	5	52	0.013077	100.000000000000	0.17	0.00
18	N	1	1	0.0	F	25	5	52	0.000000	100.000000000000	0.00	0.00
19	N	1	1	2.7	F	25	5	52	0.010385	100.000000000000	0.14	0.00
20	N	1	1	2.7	F	25	5	52	0.010385	100.000000000000	0.14	0.00
21	N	1	1	2.7	F	25	5	52	0.010385	100.000000000000	0.14	0.00
22	N	1	1	2.4	F	25	5	52	0.009231	100.000000000000	0.12	0.00
23	N	1	1	4.0	F	25	5	52	0.015385	100.000000000000	0.20	0.00
24	N	1	1	1.2	F	25	5	52	0.004615	100.000000000000	0.06	0.00
---------											----------	----------
MASAINAME											1.24	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

16:14 Wednesday, March 29, 2006 850

---------- POLLN=NO2 AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF

plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND

plant_id

	1.24	0.00

---------- POLLN=NO2 AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
25	NO2	2102900032	029	00032	001	4	39000689	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
25	N	1	1	2.58	F	25	5	52	0.009923	100.000000000000	0.13	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	SCC	INC	CTEFF	RE	CTEFFX	ASHF
26	NO2	2102900032	029	00032	002	4	39000689	1.000000000000	0	80	1.000000000000	N
27	NO2	2102900032	029	00032	002	8	39000689	1.000000000000	0	80	1.000000000000	N
28	NO2	2102900032	029	00032	002	12	39000689	1.000000000000	0	80	1.000000000000	N
29	NO2	2102900032	029	00032	003	4	39000689	1.000000000000	0	80	1.000000000000	N
30	NO2	2102900032	029	00032	004	4	39000689	1.000000000000	0	80	1.000000000000	N
31	NO2	2102900032	029	00032	005	4	39000689	1.000000000000	0	80	1.000000000000	N
32	NO2	2102900032	029	00032	006	4	39000689	1.000000000000	0	80	1.000000000000	N
33	NO2	2102900032	029	00032	007	4	39000689	1.000000000000	0	80	1.000000000000	N
34	NO2	2102900032	029	00032	007	10	39000689	1.000000000000	0	80	1.000000000000	N
35	NO2	2102900032	029	00032	007	14	39000689	1.000000000000	0	80	1.000000000000	N
36	NO2	2102900032	029	00032	007	18	39000689	1.000000000000	0	80	1.000000000000	N
37	NO2	2102900032	029	00032	008	4	39000689	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
26	N	1	1	0.00	F	25	5	52	0.000000	100.000000000000	0.00	0.00
27	N	1	1	3.38	F	25	5	52	0.013000	100.000000000000	0.17	0.00
28	N	1	1	3.38	F	25	5	52	0.013000	100.000000000000	0.17	0.00
29	N	1	1	3.38	F	25	5	52	0.013000	100.000000000000	0.17	0.00
30	N	1	1	5.40	F	25	5	52	0.020769	100.000000000000	0.27	0.00
31	N	1	1	0.21	F	25	5	52	0.000808	100.000000000000	0.01	0.00
32	N	1	1	5.47	F	25	5	52	0.021038	100.000000000000	0.27	0.00
33	N	1	1	2.36	F	25	5	52	0.009077	100.000000000000	0.12	0.00
34	N	1	1	3.38	F	25	5	52	0.013000	100.000000000000	0.17	0.00
35	N	1	1	0.00	F	25	5	52	0.000000	100.000000000000	0.00	0.00
36	N	1	1	2.81	F	25	5	52	0.010808	100.000000000000	0.14	0.00
37	N	1	1	2.53	F	25	7	52	0.006951	100.000000000000	0.13	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
38	NO2	2102900032	029	00032	009	4	39000689	1.000000000000	0	80	1.000000000000	N
39	NO2	2102900032	029	00032	010	1	39000689	1.000000000000	0	80	1.000000000000	N
40	NO2	2102900032	029	00032	010	2	39001099	1.000000000000	0	80	1.000000000000	N
41	NO2	2102900032	029	00032	011	1	39000689	1.000000000000	0	80	1.000000000000	N
42	NO2	2102900032	029	00032	011	2	39001099	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id
COUNTYN
cnty_code

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
38	N	1	1	2.53	F	25	7	52	0.006951	100.000000000000	0.13	0.00
39	N	1	1	4.40	F	25	7	52	0.012088	100.000000000000	0.22	0.00
40	N	1	1	9.30	F	25	7	52	0.025549	15.000000000000	0.07	0.00
41	N	1	1	2.59	F	25	7	52	0.007115	100.000000000000	0.13	0.00
42	N	1	1	7.40	F	25	7	52	0.020330	15.000000000000	0.06	0.00
											2.36	0.00
											2.36	0.00
											200.11	0.60
											200.11	0.60

MASAINAME
plant_id
COUNTYN
cnty_code

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

POLLN=NO2 AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00004 MASAINAME=Nexans Magnet Wire Inc

Obs	POLLN	ALTFACID	cnty_code	plant_id	PTID	SEGID	scc	CTINFCFX	CTEASFHX	UUSPSUFL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
43	NO2	185	00004	001	2	40201001	1.000000000000	0	80	1.000000000000	N	N	1	1	38.13	F	25	7	52	0.10475	100.000000000000	1.91	0.01
44	NO2	185	00004	006	1	10200601	1.000000000000	0	80	1.000000000000	N	N	1	1	44.93	F	25	7	52	0.12343	100.000000000000	2.25	0.01
45	NO2	185	00004	017	2	10500206	1.000000000000	0	80	1.000000000000	N	N	1	1	2.66	F	25	7	52	0.00731	100.000000000000	0.13	0.00
46	NO2	185	00004	020	3	40201001	1.000000000000	0	80	1.000000000000	N	N	1	1	11.82	F	25	7	52	0.03247	100.000000000000	0.59	0.00
																						4.88	0.02

MASAINAME
plant_id

POLLN=NO2 AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory

Obs	POLLN	ALTFACID	cnty_code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
47	NO2	2118500012	185	00012	001	1	10300602	1.000000000000	0	80	1.000000000000	N	N	1	1	44.2700	F	25	7	52	0.12162	100.000000000000	2.21	0.01
48	NO2	2118500012	185	00012	001	2	10300501	1.000000000000	0	80	1.000000000000	N	N	1	1	2.0000	F	25	7	52	0.00549	20.000000000000	0.02	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
49	NO2	2118500012	185	00012	002	1	10300602	1.000000000000	0	80	1.000000000000	N
50	NO2	2118500012	185	00012	002	2	10300501	1.000000000000	0	80	1.000000000000	N
51	NO2	2118500012	185	00012	003	1	10300602	1.000000000000	0	80	1.000000000000	N
52	NO2	2118500012	185	00012	003	2	10300501	1.000000000000	0	80	1.000000000000	N
53	NO2	2118500012	185	00012	006	2	39000699	1.000000000000	0	80	1.000000000000	N
54	NO2	2118500012	185	00012	007	1	40200801	1.000000000000	0	80	1.000000000000	N
55	NO2	2118500012	185	00012	007	2	39000699	1.000000000000	0	80	1.000000000000	N
56	NO2	2118500012	185	00012	008	1	10300602	1.000000000000	0	80	1.000000000000	N
57	NO2	2118500012	185	00012	008	2	10300501	1.000000000000	0	80	1.000000000000	N
58	NO2	2118500012	185	00012	009	1	10300602	1.000000000000	0	80	1.000000000000	N
59	NO2	2118500012	185	00012	009	2	10300501	1.000000000000	0	80	1.000000000000	N
60	NO2	2118500012	185	00012	010	1	20200102	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
49	N	1	1	44.2700	F	25	7	52	0.12162	100.000000000000	2.21	0.01
50	N	1	1	2.0000	F	25	7	52	0.00549	20.000000000000	0.02	0.00
51	N	1	1	44.2708	F	25	7	52	0.12162	100.000000000000	2.21	0.01
52	N	1	1	2.0000	F	25	7	52	0.00549	27.800000000000	0.03	0.00
53	N	1	1	51.3370	F	25	5	52	0.19745	100.000000000000	2.57	0.01
54	N	1	1	1.0000	F	25	5	52	0.00385	100.000000000000	0.05	0.00
55	N	1	1	51.3370	F	25	5	52	0.19745	100.000000000000	2.57	0.01
56	N	1	1	51.3370	F	25	7	52	0.14104	100.000000000000	2.57	0.01
57	N	1	1	0.0000	F	25	7	52	0.00000	20.000000000000	0.00	0.00
58	N	1	1	51.3370	F	25	7	52	0.14104	100.000000000000	2.57	0.01
59	N	1	1	0.0000	F	25	7	52	0.00000	20.000000000000	0.00	0.00
60	N	1	1	0.0000	F	25	7	26	0.00000	616.000000000000	0.00	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
61	NO2	2118500012	185	00012	010	2	20200102	1.000000000000	0	80	1.000000000000	N
62	NO2	2118500012	185	00012	010	3	20200401	1.000000000000	0	80	1.000000000000	N
63	NO2	2118500012	185	00012	010	4	20200102	1.000000000000	0	80	1.000000000000	N
64	NO2	2118500012	185	00012	010	5	20200102	1.000000000000	0	80	1.000000000000	N
65	NO2	2118500012	185	00012	010	6	20200102	1.000000000000	0	80	1.000000000000	N
66	NO2	2118500012	185	00012	010	7	20200102	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id
COUNTYN
cnty_code

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
61	N	1	1	0.0000	F	25	7	26	0.00000	616.000000000000	0.00	0.00
62	N	1	1	0.0000	F	25	7	26	0.00000	489.000000000000	0.00	0.00
63	N	1	1	0.0000	F	25	7	26	0.00000	616.000000000000	0.00	0.00
64	N	1	1	0.0000	F	25	7	26	0.00000	616.000000000000	0.00	0.00
65	N	1	1	0.0000	F	25	7	26	0.00000	616.000000000000	0.00	0.00
66	N	1	1	0.0000	F	25	7	26	0.00000	616.000000000000	0.00	0.00
											----------	----------
											17.03	0.07
											17.03	0.07
											21.91	0.09
											21.91	0.09

MASAINAME
plant_id
COUNTYN
cnty_code

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
NO2 PROCESS LEVEL EMISSIONS PER YEAR (NTPY) AND SUMMER DAY (NTND)

---------- POLLN=NO2 AREA=Louisville cnty_code=185 COUNTYN=Oldham plant_id=00012 MASAINAME=KY State Reformatory ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
AREA												
POLLN												

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	NPROD	EF	NATNY	NATND
AREA											222.02	0.69
POLLN											222.02	0.69
											222.02	0.69

2002 VOC Point Source Emissions – Bullitt and Oldham Counties

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00002 MASAINAME=KY Solite Corp ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
1	VOC	2102900002	029	00002	001	2	39000699	1.000000000000	0	80	1.000000000000	N
2	VOC	2102900002	029	00002	002	2	39000699	1.000000000000	0	80	1.000000000000	N
3	VOC	2102900002	029	00002	002	3	39001389	1.000000000000	0	80	1.000000000000	N
4	VOC	2102900002	029	00002	003	1	30502910	1.000000000000	0	80	1.000000000000	N
5	VOC	2102900002	029	00002	003	3	39000699	1.000000000000	0	80	1.000000000000	N

MASAINAME
plant_id

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
1	N	1	1	0.0	F	25	7	52	0.000	2.800000000000	0.00	0.00
2	N	1	1	0.1	F	25	7	52	0.000	2.800000000000	0.00	0.00
3	N	1	1	0.0	F	25	7	52	0.000	0.200000000000	0.00	0.00
4	N	1	1	94304.0	F	35	7	52	362.708	0.780000000000	36.78	0.14
5	N	1	1	54.8	F	35	7	52	0.211	5.500000000000	0.15	0.00
											36.93	0.14
											36.93	0.14

MASAINAME
plant_id

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00004 MASAINAME=Four Roses Distillery Inc ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
6	VOC	2102900004	029	00004	002	1	30201003	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
6	N	1	1	375688	F	25	7	52	1032.11	6.900000000000	1296.12	3.56

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00005 MASAINAME=Jim Beam Brands Co - Clermont Plant ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
7	VOC	2102900005	029	00005	002	1	39999999	1.000000000000	0	80	1.000000000000	N
8	VOC	2102900005	029	00005	003	1	30201002	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
7	N	1	1	62829.00	F	14	7	40	125.66	0.014000000000	0.44	0.00
8	N	1	1	17742.70	F	14	6	40	41.40	2.600000000000	23.07	0.05

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00005 MASAINAME=Jim Beam Brands Co - Clermont Plant ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
9	VOC	2102900005	029	00005	003	2	39000689	1.000000000000	0	80	1.000000000000	N
10	VOC	2102900005	029	00005	003	3	39001099	1.000000000000	0	80	1.000000000000	N
11	VOC	2102900005	029	00005	005	1	30201003	1.000000000000	0	80	1.000000000000	N
12	VOC	2102900005	029	00005	006	1	39999996	1.000000000000	0	80	1.000000000000	N
13	VOC	2102900005	029	00005	007	1	10200602	1.000000000000	0	80	1.000000000000	N
14	VOC	2102900005	029	00005	007	2	10200501	1.000000000000	0	80	1.000000000000	N
15	VOC	2102900005	029	00005	007	3	10200401	1.000000000000	0	80	1.000000000000	N
16	VOC	2102900005	029	00005	008	1	10200204	1.000000000000	0	80	1.000000000000	N
17	VOC	2102900005	029	00005	008	2	10200602	1.000000000000	0	80	1.000000000000	N
18	VOC	2102900005	029	00005	009	1	10200602	1.000000000000	0	80	1.000000000000	N
19	VOC	2102900005	029	00005	009	2	10200501	1.000000000000	0	80	1.000000000000	N
20	VOC	2102900005	029	00005	010	1	39999996	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
9	N	1	1	79.65	F	14	6	40	0.19	2.800000000000	0.11	0.00
10	N	1	1	0.00	F	14	6	40	0.00	3.000000000000	0.00	0.00
11	N	1	1	385115.00	F	25	7	52	1058.01	6.900000000000	1328.65	3.65
12	N	1	1	12171.40	F	25	7	52	33.44	2.150000000000	13.08	0.04
13	N	1	1	0.00	F	8	1	4	0.00	2.800000000000	0.00	0.00
14	N	1	1	0.00	F	8	1	4	0.00	0.200000000000	0.00	0.00
15	N	1	1	0.00	F	8	1	4	0.00	0.280000000000	0.00	0.00
16	N	1	1	13997.00	F	14	6	40	32.66	0.070000000000	0.49	0.00
17	N	1	1	0.25	F	14	6	40	0.00	2.800000000000	0.00	0.00
18	N	1	1	8.38	F	25	2	52	0.08	2.800000000000	0.01	0.00
19	N	1	1	0.00	F	25	2	52	0.00	0.200000000000	0.00	0.00
20	N	1	1	100105.90	F	25	7	52	275.02	0.638000000000	31.93	0.09

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00005 MASAINAME=Jim Beam Brands Co - Clermont Plant ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
MASAINAME plant_id												

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
MASAINAME plant_id											1397.78	3.83
											1397.78	3.83

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
21	VOC	2102900019	029	00019	001	1	40500401	1.000000000000	99.5	80	0.204000000000	N
22	VOC	2102900019	029	00019	001	2	39000699	1.000000000000	0.0	80	1.000000000000	N
23	VOC	2102900019	029	00019	001	3	39999999	1.000000000000	99.5	80	0.204000000000	N
24	VOC	2102900019	029	00019	001	4	39999995	1.000000000000	0.0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
21	N	1	1	47.7	F	25	5	52	0.18346	768.000000000000	3.74	0.01
22	N	1	1	3.1	F	25	5	52	0.01192	5.500000000000	0.01	0.00
23	N	1	1	3.2	F	25	5	52	0.01231	117.000000000000	0.04	0.00
24	N	1	1	976.0	F	25	5	52	3.75385	6.600000000000	3.22	0.01

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
25	VOC	2102900019	029	00019	002	1	40500401	1.000000000000	99.5	80	0.204000000000	N
26	VOC	2102900019	029	00019	002	2	39000699	1.000000000000	0.0	80	1.000000000000	N
27	VOC	2102900019	029	00019	002	3	39999999	1.000000000000	99.5	80	0.204000000000	N
28	VOC	2102900019	029	00019	002	4	39999995	1.000000000000	0.0	80	1.000000000000	N
29	VOC	2102900019	029	00019	003	1	40500401	1.000000000000	99.5	80	0.204000000000	N
30	VOC	2102900019	029	00019	003	2	39000699	1.000000000000	0.0	80	1.000000000000	N
31	VOC	2102900019	029	00019	003	3	39999999	1.000000000000	99.5	80	0.204000000000	N
32	VOC	2102900019	029	00019	003	4	39999995	1.000000000000	0.0	80	1.000000000000	N
33	VOC	2102900019	029	00019	004	1	39999999	1.000000000000	99.5	80	0.204000000000	N
34	VOC	2102900019	029	00019	004	2	39999995	1.000000000000	0.0	80	1.000000000000	N
35	VOC	2102900019	029	00019	004	3	40500401	1.000000000000	99.5	80	0.204000000000	N
36	VOC	2102900019	029	00019	004	4	39000699	1.000000000000	0.0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
25	N	1	1	15.8	F	25	5	52	0.06077	768.000000000000	1.24	0.00
26	N	1	1	2.2	F	25	5	52	0.00846	5.500000000000	0.01	0.00
27	N	1	1	1.0	F	25	5	52	0.00385	117.000000000000	0.01	0.00
28	N	1	1	324.0	F	25	5	52	1.24615	6.600000000000	1.07	0.00
29	N	1	1	42.6	F	25	5	52	0.16385	768.000000000000	3.34	0.01
30	N	1	1	3.4	F	25	5	52	0.01308	5.500000000000	0.01	0.00
31	N	1	1	3.7	F	25	5	52	0.01423	117.000000000000	0.04	0.00
32	N	1	1	93.0	F	25	5	52	0.35769	6.600000000000	0.31	0.00
33	N	1	1	0.0	F	25	5	52	0.00000	531.900000000000	0.00	0.00
34	N	1	1	0.0	F	25	5	52	0.00000	6.600000000000	0.00	0.00
35	N	1	1	0.0	F	25	5	52	0.00000	768.000000000000	0.00	0.00
36	N	1	1	0.0	F	25	5	52	0.00000	5.500000000000	0.00	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
37	VOC	2102900019	029	00019	005	1	39999995	1.000000000000	0.0	80	1.000000000000	N
38	VOC	2102900019	029	00019	005	2	39999999	1.000000000000	99.5	80	0.204000000000	N
39	VOC	2102900019	029	00019	005	3	40500401	1.000000000000	99.5	80	0.204000000000	N
40	VOC	2102900019	029	00019	005	4	39000699	1.000000000000	0.0	80	1.000000000000	N
41	VOC	2102900019	029	00019	006	1	40500401	1.000000000000	99.5	80	0.204000000000	N
42	VOC	2102900019	029	00019	006	2	39999999	1.000000000000	99.5	80	0.204000000000	N
43	VOC	2102900019	029	00019	006	3	39999995	1.000000000000	0.0	80	1.000000000000	N
44	VOC	2102900019	029	00019	006	4	39000699	1.000000000000	0.0	80	1.000000000000	N
45	VOC	2102900019	029	00019	007	1	40500401	1.000000000000	99.5	80	0.204000000000	N
46	VOC	2102900019	029	00019	007	2	39999999	1.000000000000	99.5	80	0.204000000000	N
47	VOC	2102900019	029	00019	007	3	39999995	1.000000000000	0.0	80	1.000000000000	N
48	VOC	2102900019	029	00019	007	4	39000699	1.000000000000	0.0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
37	N	1	1	1302.0	F	25	5	52	5.00769	6.600000000000	4.30	0.02
38	N	1	1	4.3	F	25	5	52	0.01654	117.000000000000	0.05	0.00
39	N	1	1	63.6	F	25	5	52	0.24462	768.000000000000	4.98	0.02
40	N	1	1	2.7	F	25	5	52	0.01038	5.500000000000	0.01	0.00
41	N	1	1	63.6	F	25	5	52	0.24462	768.000000000000	4.98	0.02
42	N	1	1	4.3	F	25	5	52	0.01654	117.000000000000	0.05	0.00
43	N	1	1	1302.0	F	25	5	52	5.00769	6.600000000000	4.30	0.02
44	N	1	1	2.7	F	25	5	52	0.01038	5.500000000000	0.01	0.00
45	N	1	1	39.8	F	25	5	52	0.15308	768.000000000000	3.12	0.01
46	N	1	1	2.7	F	25	5	52	0.01038	117.000000000000	0.03	0.00
47	N	1	1	814.0	F	25	5	52	3.13077	6.600000000000	2.69	0.01
48	N	1	1	2.7	F	25	5	52	0.01038	5.500000000000	0.01	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
49	VOC	2102900019	029	00019	008	1	40500401	1.000000000000	99.5	80	0.204000000000	N
50	VOC	2102900019	029	00019	008	2	39999999	1.000000000000	99.5	80	0.204000000000	N
51	VOC	2102900019	029	00019	008	3	39999995	1.000000000000	0.0	80	1.000000000000	N
52	VOC	2102900019	029	00019	008	4	39000699	1.000000000000	0.0	80	1.000000000000	N
53	VOC	2102900019	029	00019	009	1	40500401	1.000000000000	99.5	80	0.204000000000	N
54	VOC	2102900019	029	00019	009	2	39999999	1.000000000000	99.5	80	0.204000000000	N
55	VOC	2102900019	029	00019	009	3	39999995	1.000000000000	0.0	80	1.000000000000	N
56	VOC	2102900019	029	00019	009	4	39000699	1.000000000000	0.0	80	1.000000000000	N
57	VOC	2102900019	029	00019	010	1	40500401	1.000000000000	99.5	80	0.204000000000	N
58	VOC	2102900019	029	00019	010	2	39999999	1.000000000000	99.5	80	0.204000000000	N
59	VOC	2102900019	029	00019	010	3	39999995	1.000000000000	0.0	80	1.000000000000	N
60	VOC	2102900019	029	00019	010	4	39000699	1.000000000000	0.0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
49	N	1	1	19.9	F	25	5	52	0.07654	768.000000000000	1.56	0.01
50	N	1	1	0.7	F	25	5	52	0.00269	531.940000000000	0.04	0.00
51	N	1	1	407.0	F	25	5	52	1.56538	6.600000000000	1.34	0.01
52	N	1	1	2.4	F	25	5	52	0.00923	5.500000000000	0.01	0.00
53	N	1	1	63.6	F	25	5	52	0.24462	768.000000000000	4.98	0.02
54	N	1	1	4.3	F	25	5	52	0.01654	117.000000000000	0.05	0.00
55	N	1	1	385.0	F	25	5	52	1.48077	2.200000000000	0.42	0.00
56	N	1	1	4.0	F	25	5	52	0.01538	5.500000000000	0.01	0.00
57	N	1	1	19.9	F	25	5	52	0.07654	768.000000000000	1.56	0.01
58	N	1	1	0.7	F	25	5	52	0.00269	531.940000000000	0.04	0.00
59	N	1	1	407.0	F	25	5	52	1.56538	6.600000000000	1.34	0.01
60	N	1	1	1.2	F	25	5	52	0.00462	5.500000000000	0.00	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00019 MASAINAME=Publishers Printing Co - Shepherdsville Facility ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
MASAINAME plant_id												

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
MASAINAME plant_id												
											48.92	0.19
											48.92	0.19

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
61	VOC	2102900032	029	00032	001	1	40500401	1.000000000000	95	80	0.240000000000	N
62	VOC	2102900032	029	00032	001	2	39999995	1.000000000000	0	80	1.000000000000	N
63	VOC	2102900032	029	00032	001	3	39999994	1.000000000000	95	80	0.240000000000	N
64	VOC	2102900032	029	00032	001	4	39000689	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
61	N	1	1	25.00	F	25	5	52	0.0962	758.000000000000	2.27	0.01
62	N	1	1	362.00	F	25	5	52	1.3923	6.600000000000	1.19	0.00
63	N	1	1	2313.00	F	25	5	52	8.8962	1.050000000000	0.29	0.00
64	N	1	1	2.58	F	25	5	52	0.0099	5.500000000000	0.01	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
65	VOC	2102900032	029	00032	002	1	40500401	1.000000000000	95	80	0.240000000000	N
66	VOC	2102900032	029	00032	002	2	39999995	1.000000000000	0	80	1.000000000000	N
67	VOC	2102900032	029	00032	002	3	39999994	1.000000000000	95	80	0.240000000000	N
68	VOC	2102900032	029	00032	002	4	39000689	1.000000000000	0	80	1.000000000000	N
69	VOC	2102900032	029	00032	002	5	40500401	1.000000000000	95	80	0.240000000000	N
70	VOC	2102900032	029	00032	002	6	39999995	1.000000000000	0	80	1.000000000000	N
71	VOC	2102900032	029	00032	002	7	39999994	1.000000000000	95	80	0.240000000000	N
72	VOC	2102900032	029	00032	002	8	39000689	1.000000000000	0	80	1.000000000000	N
73	VOC	2102900032	029	00032	002	9	40500401	1.000000000000	95	80	0.240000000000	N
74	VOC	2102900032	029	00032	002	10	39999995	1.000000000000	0	80	1.000000000000	N
75	VOC	2102900032	029	00032	002	11	39999994	1.000000000000	95	80	0.240000000000	N
76	VOC	2102900032	029	00032	002	12	39000689	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
65	N	1	1	0.00	F	25	5	52	0.0000	758.000000000000	0.00	0.00
66	N	1	1	0.00	F	25	5	52	0.0000	6.600000000000	0.00	0.00
67	N	1	1	0.00	F	25	5	52	0.0000	0.730000000000	0.00	0.00
68	N	1	1	0.00	F	25	5	52	0.0000	5.500000000000	0.00	0.00
69	N	1	1	49.90	F	25	5	52	0.1919	758.000000000000	4.54	0.02
70	N	1	1	723.00	F	25	5	52	2.7808	6.600000000000	2.39	0.01
71	N	1	1	10551.00	F	25	5	52	40.5808	0.730000000000	0.92	0.00
72	N	1	1	3.38	F	25	5	52	0.0130	5.500000000000	0.01	0.00
73	N	1	1	59.90	F	25	5	52	0.2304	758.000000000000	5.45	0.02
74	N	1	1	868.00	F	25	5	52	3.3385	6.600000000000	2.86	0.01
75	N	1	1	12662.00	F	25	5	52	48.7000	0.730000000000	1.11	0.00
76	N	1	1	3.38	F	25	5	52	0.0130	5.500000000000	0.01	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
77	VOC	2102900032	029	00032	003	1	40500401	1.000000000000	95	80	0.240000000000	N
78	VOC	2102900032	029	00032	003	2	39999995	1.000000000000	0	80	1.000000000000	N
79	VOC	2102900032	029	00032	003	3	39999994	1.000000000000	95	80	0.240000000000	N
80	VOC	2102900032	029	00032	003	4	39000689	1.000000000000	0	80	1.000000000000	N
81	VOC	2102900032	029	00032	004	1	40500401	1.000000000000	95	80	0.240000000000	N
82	VOC	2102900032	029	00032	004	2	39999994	1.000000000000	95	80	0.240000000000	N
83	VOC	2102900032	029	00032	004	3	39999995	1.000000000000	0	80	1.000000000000	N
84	VOC	2102900032	029	00032	004	4	39000689	1.000000000000	0	80	1.000000000000	N
85	VOC	2102900032	029	00032	005	1	40500401	1.000000000000	95	80	0.240000000000	N
86	VOC	2102900032	029	00032	005	2	39999994	1.000000000000	95	80	0.240000000000	N
87	VOC	2102900032	029	00032	005	3	39999995	1.000000000000	0	80	1.000000000000	N
88	VOC	2102900032	029	00032	005	4	39000689	1.000000000000	0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
77	N	1	1	59.90	F	25	5	52	0.2304	758.000000000000	5.45	0.02
78	N	1	1	868.00	F	25	5	52	3.3385	6.600000000000	2.86	0.01
79	N	1	1	12662.00	F	25	5	52	48.7000	0.730000000000	1.11	0.00
80	N	1	1	3.38	F	25	5	52	0.0130	5.500000000000	0.01	0.00
81	N	1	1	89.80	F	25	5	52	0.3454	758.000000000000	8.17	0.03
82	N	1	1	18993.00	F	25	5	52	73.0500	0.730000000000	1.66	0.01
83	N	1	1	1302.00	F	25	5	52	5.0077	6.600000000000	4.30	0.02
84	N	1	1	5.40	F	25	5	52	0.0208	5.500000000000	0.01	0.00
85	N	1	1	4.20	F	25	5	52	0.0162	758.000000000000	0.38	0.00
86	N	1	1	886.00	F	25	5	52	3.4077	0.730000000000	0.08	0.00
87	N	1	1	61.00	F	25	5	52	0.2346	6.600000000000	0.20	0.00
88	N	1	1	0.21	F	25	5	52	0.0008	5.500000000000	0.00	0.00

KENTUCKY DIVISION FOR AIR QUALITY 2003 TEMPO EMISSIONS
ACTUAL POINT SOURCE EMISSIONS OF VOC, CO, AND NO2
KENTUCKY PORTION OF THE LOUISVILLE AREA
BULLITT AND OLDHAM COUNTIES
VOC PROCESS LEVEL EMISSIONS PER YEAR (VTPY) AND SUMMER DAY (VTND)

---------- POLLN=VOC AREA=Louisville cnty_code=029 COUNTYN=Bullitt plant_id=00032 MASAINAME=Publishers Printing Co - Lebanon Junction Press ----------
(continued)

Obs	POLLN	ALTFACID	cnty_ code	plant_id	PTID	SEGID	scc	INC	CTEFF	RE	CTEFFX	ASHF
89	VOC	2102900032	029	00032	006	1	40500401	1.000000000000	95.0	80	0.240000000000	N
90	VOC	2102900032	029	00032	006	2	39999994	1.000000000000	95.0	80	0.240000000000	N
91	VOC	2102900032	029	00032	006	3	39999995	1.000000000000	0.0	80	1.000000000000	N
92	VOC	2102900032	029	00032	006	4	39000689	1.000000000000	0.0	80	1.000000000000	N
93	VOC	2102900032	029	00032	007	1	40500401	1.000000000000	95.0	80	0.240000000000	N
94	VOC	2102900032	029	00032	007	2	39999994	1.000000000000	95.0	80	0.240000000000	N
95	VOC	2102900032	029	00032	007	3	39999995	1.000000000000	0.0	80	1.000000000000	N
96	VOC	2102900032	029	00032	007	4	39000689	1.000000000000	0.0	80	1.000000000000	N
97	VOC	2102900032	029	00032	007	7	40500401	1.000000000000	95.0	80	0.240000000000	N
98	VOC	2102900032	029	00032	007	8	39999994	1.000000000000	95.0	80	0.240000000000	N
99	VOC	2102900032	029	00032	007	9	39999995	1.000000000000	0.0	80	1.000000000000	N
100	VOC	2102900032	029	00032	007	10	39000689	1.000000000000	0.0	80	1.000000000000	N

Obs	SULF	UPASH	UPSUL	FUELP	CONF	ATHJ	DWK	WKYR	VPROD	EF	VATNY	VATND
89	N	1	1	87.80	F	25	5	52	0.3377	758.000000000000	7.99	0.03
90	N	1	1	16962.00	F	25	5	52	65.2385	0.730000000000	1.49	0.01
91	N	1	1	1139.00	F	25	5	52	4.3808	6.600000000000	3.76	0.01
92	N	1	1	5.47	F	25	5	52	0.0210	5.500000000000	0.02	0.00
93	N	1	1	34.60	F	25	5	52	0.1331	758.000000000000	3.15	0.01
94	N	1	1	8481.00	F	25	5	52	32.6192	0.730000000000	0.74	0.00
95	N	1	1	571.00	F	25	5	52	2.1962	6.600000000000	1.88	0.01
96	N	1	1	2.36	F	25	5	52	0.0091	5.500000000000	0.01	0.00
97	N	1	1	75.90	F	25	5	52	0.2919	758.000000000000	6.90	0.03
98	N	1	1	16962.00	F	25	5	52	65.2385	0.730000000000	1.49	0.01
99	N	1	1	1139.00	F	25	5	52	4.3808	6.600000000000	3.76	0.01
100	N	1	1	3.38	F	25	5	52	0.0130	5.500000000000	0.01	0.00